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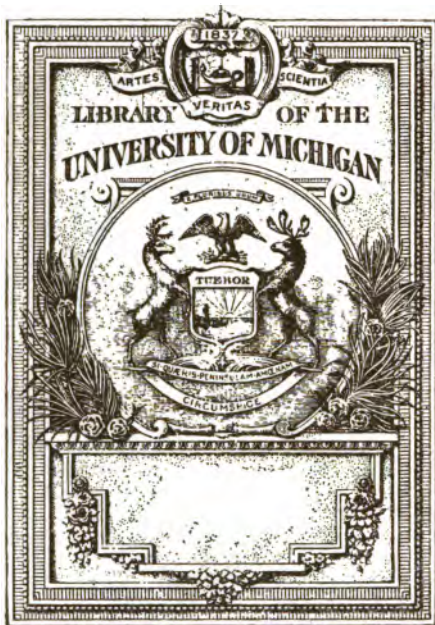
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DEPARTMENT OF COMMERCE

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

E. E. PRATT, Chief

SPECIAL AGENTS SERIES—No. 121

# ARTIFICIAL DYESTUFFS USED IN THE UNITED STATES

QUANTITY AND VALUE OF FOREIGN IMPORTS  
AND OF DOMESTIC PRODUCTION DURING THE  
FISCAL YEAR 1913-14

By

THOMAS H. NORTON

Commercial Agent



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## LETTER OF SUBMITTAL.

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DEPARTMENT OF COMMERCE,  
BUREAU OF FOREIGN AND DOMESTIC COMMERCE,  
*Washington, August 31, 1916.*

SIR: There is submitted herewith a report by Commercial Agent Thomas H. Norton on the artificial dyestuffs currently employed in the United States by the textile, paper, ink, varnish, fur, feather, paint, and various other industries. The report gives in detail the quantity and value of each of the 5,674 brands of synthetic colors imported from Europe into the United States during the fiscal year 1913-14. It furnishes similar information on the coal-tar crudes and intermediates imported during the same period. A complete list of all artificial colors manufactured in the United States prior to 1915 is added.

The volume provides in compact, carefully classified form all available data on quantity needed by those now engaged in creating a comprehensive, self-contained, American coal-tar dyestuff industry. Without such exact information on the extent of the normal domestic consumption of each of the several thousand dyes in current use, this new branch, thus far lacking in the cycle of the nation's manufacturing activities, can not come into existence, except in a costly, haphazard, slow, uncertain manner. The report will, therefore, constitute the most important foundation stone for the young American industry.

It is noteworthy that no similar census of colors has hitherto been attempted in any country or in any language—possibly on account of the vast amount of expert labor required for the compilation and editing of the great volume of data.

In the collation and arrangement of the data in this report Dr. Norton has had the cooperation of Maurice J. Langdon, Ph. D., William M. Springer, Ch. E., and Mr. Thomas Tryon, all of New York City. Highly valued aid has also been rendered by officials of the customs division of the Treasury Department, especially by those connected with the New York Customhouse, in bringing together the documentary material containing the data. Cordial and valued assistance has likewise been given by the Chief Statistician for Manufactures in the Bureau of the Census. The Barrett Co. of New York City,

has courteously permitted the use of the instructive diagram, "Products derived from coal and some of their uses," which accompanied a paper by Mr. William Hamlin Childs, president of the company, read before the American Iron and Steel Institute at its annual meeting in New York, May 26, 1916. Dr. D. D. Berolzheimer, librarian of the Barrett Co., has kindly assisted in compiling the bibliography of works dealing with coal-tar derivatives.

Respectfully,

E. E. PRATT,  
*Chief of Bureau.*

TO HON. WILLIAM C. REDFIELD,  
*Secretary of Commerce.*

## ARTIFICIAL DYESTUFFS USED IN THE UNITED STATES.

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### INTRODUCTION.

The necessity for a complete enumeration of the artificial coloring matters regularly consumed by the various manufacturing industries of this country soon became evident when these branches were threatened in 1914 by a dyestuff famine, as a result of the great European war.

Those who took into careful consideration the possibility of creating an independent American coal-tar dyestuff industry were obliged to study closely a number of factors bearing upon this exceedingly complicated question.

Among these were such items as the supply of crude materials, the chemists and chemical engineers available, the probable attitude of the European interests hitherto furnishing our synthetic dyes upon the return of normal international conditions, the requisite fiscal and other legislation essential to safeguard American enterprise and capital against unfair competition on the part of such foreign rivals, etc.

First and foremost, however, came the factor of quantity. What is the total annual consumption of artificial colors in the United States? How many different dyes are in current use? What is the average annual consumption of each of these dyes?

The necessity of exact information on these three points is self-evident to some. For most a brief explanation may be helpful.

In a general way we know how the great dyestuff industries of Germany and Switzerland are organized. We understand the relations of capital, of technical staff, etc., to output. From an economic standpoint it is necessary to know the total extent of the American market for this class of products, in order to estimate approximately the amount of capital required for a comprehensive industry, the number of trained chemists and engineers needed, and the quantities of coal-tar crudes to be provided. These form the main links in the chain connecting the gas works and the coke plants yielding coal tar and the gases containing benzene and its homologues, with the multitude of mills and shops in which synthetic colors are employed to produce chromatic effects upon wares of the most varied nature—paper, textiles, leather, wood, ink, varnish, fur, feathers, foods, beverages, etc.

While such leading data are of prime importance from a general economic standpoint, of still greater value are the details concerning the specific products of the synthetic color industry.

## NECESSITY OF A CENSUS OF DYES.

There are nearly 1,000 coal-tar dyestuffs of recognized standing in the tinctorial world; i. e., their chemical composition, or at least the methods of preparation, are publicly known. About twice as many are regularly manufactured, and enter into international trade. Regarding the preparation or the composition of these little or nothing has been published. Many colors of both categories are encountered commercially in the form of several marks or brands. They represent slight modifications of the primary dye, sometimes in regard to shade, often in regard to convenience of application. The form in which a dye is prepared for use on cotton may not be the best form for the needs of the silk dyer. The requirements of the feather dyer may be quite different from those of the manufacturer of ink.

It is essential that the organizers of a national color industry know, with a certain approximation to accuracy, how much annually is consumed of each primary dye and how much of each minor modification is employed. Without such data a manufacturer can not calculate the size and number of the units to be constructed for the production of any given dye, and he is at an equal loss as to the equipment necessary to manufacture it in the different modifications of current use.

Again, the industry is one of great complexity, involving a high degree of coordination and of careful planning to avoid material loss in the way of by-products. In the various steps intervening between a coal-tar "crude" and a finished dyestuff each chemical reaction in the sequence is apt to produce certain percentages of closely allied compounds, isomeric substances as a rule. These latter may possess the same general chemical composition as the product more directly sought. The arrangement of the atoms in the molecule is, however, quite different. As a result, physical and chemical properties are totally unlike those characterizing the main substances. Such by-products possess, as a rule, distinct technical and commercial value. One may serve to make an entirely different dyestuff, another may be the raw material for manufacturing a valued medicinal; a third may be employed in the production of a photographic developer, etc.

It is evident, therefore, that the establishment of a synthetic color industry means an elaborate study of a multitude of interrelated operations, allied furthermore with numerous products in a group of closely connected industries, based likewise upon the use of coal-tar crudes. To some extent the changing whims of fashion enter into play. Back of every plan and calculation stands, however, the dominant factor of quantity.

It is now generally recognized that any intelligent effort to build up a comprehensive, self-contained American coal-tar chemical industry must rest upon the solid foundations of accurate statistical data concerning the American market for artificial colors. In no other way can the creators of such an industry avoid duplication, overlapping, waste, and blundering, tentative struggles to adjust productive mechanism to a vague, indefinite demand. Without such fundamental data the future industry will be heavily handicapped by permanent overhead charges, accumulated as the result of being forced to feel its way in the dark, chemically, mechanically, and commercially.

If the coming American dyestuff industry is to hold its own successfully against foreign competition, it must be free from any unnecessary shackle. It must start into existence during these years of conflict in Europe. It must utilize to the full all the gathered stores of experience accumulated during the six decades since Perkin's epochal discovery, and become a world factor in the seventh period of the history of synthetic color at whose portal we now stand.

To no one is this country more indebted than to Dr. Bernhard C. Hesse, of New York, for a clear, forcible presentation of the complexity of the synthetic dyestuff industry and of the pressing necessity of accurate data on the domestic consumption of artificial colors.

In April, 1915, in an address before the National Association of Cotton Manufacturers, he outlined the problem to a representative body of consumers of colors so lucidly and so effectively that much of what he stated on that occasion can appropriately be reproduced here as a historic document.

EXTRACT FROM AN ADDRESS BY DR. BERNHARD C. HESSE ON THE NEED OF A CENSUS OF COAL-TAR COLORS.

The elements of the manufacturing problem may be stated as follows:

Ten things from coal tar, called "crudes," form the contribution of coal tar to this industry.

These 10 things, by the aid of numerous non-coal-tar things, such as acids, alkalis, gases, and the like, are converted into about 300 other things called "intermediates."

These 300 intermediates are "assembled" to form 900 finished products or dyes.

A parallel might be: Ten fibers make 300 yarns, which are woven into 900 patterns.

In the dye industry the key to the situation is in the "intermediates," i. e., the "yarns" of the parallel. In the "assembling" of the intermediates to dyes, little if any disturbance is introduced by the formation of "by-products"; this difficulty is practically limited to the making of intermediates, and the manufacturing problem is largely centered at that point. By-products are unfortunately formed at almost all the steps in making intermediates from crudes.

This is illustrated in figure 1, where the toluol is shown as being treated with chlorine. In this case the products are three, namely:

1. Benzyl chloride,
2. Benzal chloride,
3. Benzo-trichloride.

They are wholly different from each other. While No. 1 can be converted into No. 2 or No. 3, or No. 2 can be converted into No. 3, the reverse is not commercially possible. If any one of these three is desired, more or less of the other two is always produced, except perhaps in the case of No. 3 under very narrow specific conditions. If you want No. 1 you must be prepared to find some No. 2 and some No. 3 with it, and so on. The proportions are under some control, but not wholly. The relative and actual amounts of each made during a given period, say one year, will depend upon other conditions; but at the end of the year all three should be completely manufactured up into goods. The factory that handles this problem best is, of course, best positioned.

As a parallel: Suppose that a spinning machine, set for fine yarn, always had to make a certain amount of medium yarn and of coarse yarn. When these yarns are woven up, the amounts of woven product will depend upon the relative amounts of fine, medium, and coarse yarns available.

By consulting figure 1 you will see that benzyl chloride, the fine yarn of the parallel, is used with other things in making three dyes; that benzal chloride, the medium yarn of the parallel, is used in a group of dyes numbering, say, 30; that benzo-trichloride, the coarse yarn of the parallel, is used in but one dye of that figure. The fine yarn is used in three patterns, the medium in 30 patterns, and the coarse yarn in one pattern.

The manufacturing problem here is to adjust your weaving capacity so that it shall always keep pace with your spinning capacity.







Now, figure 1 represents about one-fortieth or 2½ per cent of the present-day finished dyes. As a matter of fact, these chlorides, i. e., these yarns of the parallel, are useful in many other dyes or "patterns." This complicates the problem considerably; but leave that out of present consideration.

In figure 2 you will see that one "yarn," i. e., 1.6 nitro-naphthalene-sulphonic acid is produced in equal amount with another "yarn" 1.7 nitro-naphthalene-sulphonic acid. Further, the 1.6 "yarn" is of no use whatever in making other "yarns" or other "patterns"; 1.6 is a dead loss, so far as this chart is concerned; 1.7 must be changed into three intermediate "yarns" before it is converted into a "yarn" that can be woven into a "pattern."

The chemist can not completely eliminate these by-products; he can control them, but they are always with him. The only manufacturing remedy is to work them up into other products that are salable. That is one of the annoying solid facts confronting this industry.

In the merchandising end your sales department must be capable of placing at a profit each of the various finished dyes in such relative amounts that practically none of the by-products is left unsold at the end of the year.

To go back to the parallel: Assume these "yarns" to be used as the weft or filling only; the fine yarn is used for babies' jackets, the medium for men's socks, the coarse for mittens. Assume, also, that the relative amounts of these yarns is such that for every 100 baby jackets you must make 10 pairs of socks and 5 pairs of mittens. The sales department has got to keep these markets in that alignment, namely, 100:10:5. If the mitten market takes a jump the factory has got to get more coarse yarn from somewhere or make more jackets and socks, and the sales department has got to nurse the jacket and sock markets up to mitten-market proportions. If these markets can not be increased the factory must look for a new or added supply of coarse yarn, or the works must carry jackets and socks in stock until their markets look up again. In this parallel the operation can be so set that one or the other of the three chlorides is in excess; the factory can reset the operation so that more of the coarse yarn, or of the medium yarn, or of the fine yarn can be made, but all three are made, and their products must be disposed of. This is not always a difficult problem, but is in many cases. A similar condition is repeated at each oval of figures 1 and 2.

Only those ovals next preceding the squares of figure 1 when used as "filling" with Michler's ketone as "warp" produce the 24 dyes there listed. The other ovals are merely contributory to such final ovals. The squares of figure 2, when used as "filling," with benzidine as "warp," produce part of the "filling" needed to make 82 of the benzidine direct cotton dyes, not shown.

In figure 1 there are upward of 40 points where the above parallel of jackets, socks, and mittens has to be worked out, but under different conditions, and with different products and different market conditions in each case; serious and important in most of the cases and of little importance in but few. In figure 2 there are over 60 such points. So, for these 106 dyes or "patterns" there are about 100 points where the factory and sales divisions must cooperate as above described—teamwork of the highest order.

Thus, in the manufacture of these 106 dyes, important points of economic balance between intermediate products occur about 100 times.

For the 900 dyes of the American market there are probably several hundred such points, and they must be solved if a complete and independent coal-tar dye industry is to be created here.

From the actual manufacturing viewpoint this is not at all an insoluble problem for our country. No one will, however, deny that it is a difficult and hazardous problem commercially, and its ultimate solution will be quite different from that in Germany. Here we will have to solve it in competition with a worked-out and operative method. We will have to go ahead slowly, and *our speed will be governed by the accuracy of our knowledge of the markets for the finished dyes in this country.* For some time we will have to be dependent solely upon our own market as an outlet, while Germany can look to over 30 other countries as a source of revenue for its dye industry.

In considering figures 1 and 2 bear in mind that each square or oval represents a separate and distinct manufacture, calling for separate apparatus, oversight, and management. In figure 1 the squares represent finished dyes or "patterns"; the ovals represent intermediates or "yarns." The annual output of each of these squares is by no means the same from square to square. The factory division will have to know within reasonable limits the annual amount of each to be made, before it can operate to the best advantage. It can, of course, go ahead and build the several types of apparatus of a certain size and trust to developments to teach it how the different colors should be manufactured with respect to each other, and then alter and change to suit

the new conditions. That, of course, is slow and expensive. It might well be that at the very outset the conditions had been misconstrued. *It is the lack of this knowledge that is holding up general progress here more than any other single technical point or feature.*

Obviously, the more information at hand as to the actual market conditions for each of these 24 dyes in this country the smaller the risk due to alterations and changes. Multiply these conditions so as to cover the 900 dyes of this market and you will have an idea of the magnitude and complexity of this one aspect of the problem alone. Just translate this problem to cover 900 different fabrics made up of 300 different yarns and 10 fibers and no doubt its bewildering and puzzling nature and importance will more effectively be brought home to you, particularly if you keep in mind the by-products feature of the problem.

Or, to put it another way: Suppose each oval and square of figure 1 to be a separate building or portion of a building, and give yourself the problem of laying out a hundred-acre lot with its buildings so adjusted as to size, and so arranged as to relative position, that no motion or efficiency loss results, and to provide for 900 squares and 300 ovals. The first thing you would want to know would be the size of the various buildings, and these are determined by the size of the squares and these in turn by the output expected of them, and this is governed by their respective markets in this country. Then add to this the problem of properly arranging your apparatus in each building and in the proper building.

The complexity of this problem is not reduced by the fact that these squares and ovals are not all the factory buildings or their equivalents that are needed. You need sulphuric, muriatic, nitric, and acetic acid plants, caustic soda, chlorine, and many other similar plants, none of them here shown. How large shall these be? Where shall they be located and what amounts of all raw materials shall be contracted for? These are all questions that must be disposed of before progress can be made in establishing a complete, self-contained, and independent industry.

To my mind there is no escape whatever from the conclusion, which I have elsewhere stated, that the fundamental information required for the solution of this national problem is *that as to actual domestic market conditions of these 900 dyes or "patterns."* Proceeding without such knowledge is accompanied by excessive risk. Progress under those conditions must be made cautiously and, in consequence, slowly.

Surely, in such a long line of intermediates and finished dyes there must be several points of entry for a domestic industry, complete and independent. Which is the point of successful entry? That is the rub. Some domestic makers are trying to break in along the line of aniline oil; others by the way of paranitraniline and betanaphthol; others are considering indigo or alizarin; and still others are thinking of a wool black as the point of entry, and so on. Which will succeed, some or all, can be answered by events alone. They may all have guessed right. Some or all may have guessed wrong. In any event, these attempts must each result in a partial solution only, and will require much time. These attempts being made at widely separated points, it follows that at each such point much duplication of labor and expenditure must occur. That is, there will have to be duplication of the various auxiliary chemical plants and similar contributory factories. Such a campaign must necessarily lead more slowly to a complete and self-contained solution of this problem than would concerted action at a single plant. Reduced to its simplest terms and supplemented by considerable knowledge, the problem is simply bristling with constructional, technical, and merchandising difficulties, quite apart from the economic obstacles in its way.

For example, aniline oil, as such, is roughly \$400,000 per year, or \$1,333 per day. However, aniline oil enters into all the dyes of figure 1 by way of Michler's ketone, and in addition as "filling" in 12 dyes or "patterns." It makes up about 35 per cent, by weight, of all these 24 dyes based upon a common unit of ketone. Aniline is one of the materials for indigo, and its progenitor—nitrobenzene—is used in making benzidine. Aniline oil is also used in making many of the auxiliaries, or "fillings," in many of the benzidine dyes. Now, how large must an aniline oil plant be to make the necessary aniline oil and nitrobenzene for (1) the aniline oil market, (2) the indigo market, (3) the ketone dye market (fig. 1), (4) the benzidine dye market (fig. 2)?

From our commerce reports, No. 1 is about \$400,000 and No. 2 is about \$120,000; but there is no way of telling from these reports how large 3 and 4 are. Nos. 1 and 2 call for about 5,000,000 pounds, worth \$500,000, of aniline oil a year. Do 3 and 4 make up another 5,000,000 pounds, or only 1,000,000 pounds, of aniline oil or nitrobenzene?

How much larger must the plant be to provide for all the aniline used in the remaining dyes consumed in this country?

The consumption of para-nitraniline is said to be anywhere from 400,000 pounds to 2,000,000 pounds, according to the source of information. Beta-naphthol varies to the same extent. Assuming that their consumption is each 2,000,000 pounds, with para at 20 cents per pound, the annual consumption is worth \$400,000, and with beta at 8 cents per pound its value is \$160,000. That is, the daily average of para is \$1,333 and of beta \$533. This amount of para would call for an additional amount of about 2,000,000 pounds of aniline oil per year.

How large is the wool-black market? There are no official figures to give even a guide to a guess. The best type of wool black calls for 23 per cent of salicylic acid, 23 per cent of naphthylamine, and 38 per cent of naphthol-sulphonic acid by weight.

How large shall the salicylic acid plant be? How much carbolic acid must be provided? How much naphthylamine and how much naphthol-sulphonic acid? Without a reasonable knowledge of what the total consumption of wool black is, who can make even an approximate guess.

Then come the questions: What share of this total market is your particular plant going to get? If not all of these 900 dyes are to be made, which ones will you omit?

It is therefore clear that a mere knowledge of grand averages and of maximum amounts is of little help in planning the layout of an establishment of this kind. As nearly definite information as possible for each of the 900 finished dyes should be at hand in order that a reasonably safe layout may be made.

Some of the difficulties just mentioned would be reduced, but not eliminated, if reasonably complete information as to this country's markets were accessible to those who are endeavoring to solve this problem for the Nation. Those who have this information are of two classes, and they will not divulge it, namely, the importers collectively, and they certainly can not be expected to hand it over; the others are the dye users collectively, and they decline to give it.

I doubt if there is any one thing that the dye users of this country can do that promises to push this problem further along toward a technical solution than to collect this information in a dependable manner, and make it accessible to prospective dye makers. If, with that knowledge available, the problem can not be technically solved, the *chances are that it never can be solved*. In the event of a successful solution, while this information is withheld, that knowledge will have to be acquired by the slow, laborious, and expensive method of "cut and try"—that is, of "feeling out" the market.<sup>1</sup>

#### ACTION OF THE BUREAU OF FOREIGN AND DOMESTIC COMMERCE.

Early in 1915 the embargo came into force shutting off German dyes from this country. Long before, the relatively small supply of colors from England, France, Belgium, and Holland had practically ceased and the somewhat more important source in Switzerland was threatened with paralysis.

The Bureau of Foreign and Domestic Commerce in Washington was following with the keenest interest, and even with anxiety, the initial steps taken bravely and resolutely by a small band of far-sighted American men, some manufacturers, some capitalists—all patriots—convinced that finally the opportunity had arrived to build up a genuinely national coal-tar chemical industry.

In the earnest desire to second their efforts and facilitate their plans, as well as to insure the most favorable and economical conditions for the rapid evolution of the new industry on a permanent basis, it was promptly recognized, in harmony with the reasoning detailed above, that nothing could be of such direct assistance as a "census" of the dyestuffs consumed normally in this country. Plans were carefully laid to carry out the work as expeditiously, accurately, and fully as the very limited appropriations at the command of the Bureau for such general purposes would permit.

<sup>1</sup>Textile Manufacturers' Journal, May 1, 1915, p. 60.

### HOW THE CENSUS WAS TAKEN.

First of all it was necessary to decide upon the *modus operandi*. It has been suggested by some, who had early recognized the desirability of such a "census," that the only available method for securing the needed data was to appeal to all consumers of artificial colors for their cooperation. It was thought that a ready response would be given to circular requests for detailed information regarding the annual consumption of coal-tar dyes by each user of the same. It was proposed, in order to overcome the customary repugnance of manufacturers to communicate facts of this nature, that the replies should be sent to some central financial institution, which would guarantee secrecy in collating the numerical information thus gathered.

A careful analysis of the problem showed that any such method of collecting data was impracticable. It would be impossible to secure a complete list of all users of dyestuffs in scores of trades and manufacturing branches. Assuming that figures could be obtained from all users of colors, their compilation would be a herculean task. Suppose that 5 tons of Congo Red are consumed annually in this country. This amount might be divided up among several thousand consumers in lots ranging from 5 to 100 pounds.

With a somewhat elementary knowledge of human psychology, it was furthermore certain that no replies could be expected from the great majority of the recipients of circular requests. Indifference, suspicion, or pure laziness are serious factors to overcome.

### BRITISH ATTEMPT TO TAKE A CENSUS OF COLORS.

The correctness of this conclusion has recently been abundantly verified by trans-Atlantic experience. British textile and allied interests have been forced to deal with a far more serious "dyestuff famine" than has been the case in the United States. There was a similar determination to build up a genuinely national color industry. The necessity of a dyestuff "census" was likewise recognized as of paramount importance. An influential committee, representing makers and consumers of dyes, took the matter in hand. Appreciating the futility of dealing directly with the multitude of individual users of colors, the committee decided to collect its statistics through the various powerful organizations of trades employing large quantities of dyestuffs and then double the results, thus roughly approximating at the entire national consumption of the various colors. After months of labor the committee was forced, in November, 1915, to report a practical failure. Replies were secured from but 19 associations or large individual consumers. The figures obtained covered but 3,145 short tons, perhaps 12 per cent of the national consumption.

### FEATURES OF THE CENSUS.

The method adopted by the Bureau of Foreign and Domestic Commerce was much more simple, direct, and accurate. As in the case of Great Britain, nearly nine-tenths of the normal American consumption is derived from European sources. It was decided to use the data based upon the imports of artificial colors into this country during the 12 months ending June 30, 1914—a month before the outbreak of the present war. The remaining tenth is covered by the

returns of the Bureau of the Census for the domestic coal-tar dyestuff industry, based upon the production in the calendar year 1914. No serious interference in the output of American colors occurred until after the beginning of 1915.

With the cordial cooperation of the Secretary of the Treasury, all the invoices for the year in question were sent by the collectors of customs at the various ports of entry to a central point, where the essential data were transcribed. These include weight, value, and price. Some 37,500 different transcripts, each covering these three items, were necessary.

These entries are found under 5,674 heads, each representing a distinct commercial designation. It must not be inferred, however, that this number of different colors comes into consideration. Many standard dyes are manufactured by several firms in the same country as well as in various countries. Frequently, some or all of the competing manufacturers use entirely different trade names for identical wares.

Thus, the red color, known chemically as sodium  $\alpha$ -naphthalene-azo- $\alpha$ -naphthol-disulphonate, is manufactured under the name of Palatine Red by the Badische Co. The Bayer Co. sells it under the name of Naphthorubine. Primuline is encountered commercially as Polychromine, Thiochromogene, Aureoline, and Sulphine. Malachite green, a favorite color, is found under 38 different designations, few representing even slight variations in the exact chemical composition.

The reduction of this extensive vocabulary to the limits of the list given in this volume has required highly specialized editing. It is hoped that the arrangement and the full use of synonyms are such as to render the published results of the greatest utility, not only to all engaged in the manufacture of artificial dyestuffs and especially in planning for the establishment of a comprehensive American color industry, but also to all dealers in the wares and to all consumers of dyeing materials.

All three of these categories have hitherto been indebted to the painstaking labors of several prominent German color chemists, notably of Gustav Schultz and Paul Julius, for complete and detailed classifications of the coal-tar dyes in current use. The carefully elaborated "Farbstofftabellen," devised by the two authors, reached a fifth edition in 1914. These "tables," divided into groups according to chemical relationship, give for every artificial dye of known composition or preparation the commercial designation, the scientific name, the chemical formula, physical and chemical properties, methods of application, tests, and full references to patents and literature. They have for years been the *vade mecum* of all connected with the manufacture of colors, their commerce, and their manifold uses.

#### VALUE OF THE CENSUS.

It has remained for a bureau of our Government to supplement the work of the German authors, by adding the important factor of quantity. The complete exposition of the exact amounts of the many synthetic dyes, required to meet the almost numberless needs of a population of over 100,000,000, portrays approximately the relative demands of all other nations with highly organized textile and allied interests. The young American dyestuff industry, now in a position

to expand rapidly and to embrace in its scope the great majority of the colors in current use, will naturally find in these data a guide for coordinating the diverse phases of manufacture, establishing the capacity of units, and shaping all plans for harmonious expansion.

More than this, it will be of almost equal value to those seeking to create the national coal-tar industries of Great Britain, France, Russia, and Italy. Even the newly organized industry in Japan may profit from its summaries, although in a less pronounced degree, on account of the widely divergent taste for colors between the Orient and the Occident.

Should China plan to manufacture her own coal-tar dyes, but little help could be secured from this compilation in formulating schemes for installing plants. Synthetic indigo constitutes two-thirds of the Chinese consumption of artificial colors. It enters to the extent of 14 per cent into the Japanese imports of dyestuffs, and forms but 10 per cent of the American consumption.

One of the first results of the compilation of this census was to show how exceedingly vague an idea of the extent to which synthetic dyes are consumed in the United States prevailed in commercial and manufacturing circles. Those most closely in touch with the branch have estimated hitherto that the annual American consumption of coal-tar colors did not exceed 20,000 tons. As a matter of fact, it is nearly one-half again this amount—more exactly, 29,000 short tons.

## SUMMARY OF THE MOST IMPORTANT COLORS IMPORTED.

For the convenience of those studying the problem of dyestuff manufacture in its broader phases, the following summary of the more important synthetic colors currently imported into this country has been compiled from the complete list enumerated on pages 41 to 219.

It includes practically all colors the annual importation of which, during the fiscal year 1913-14, exceeded in amount 10,000 pounds.

Full explanations regarding the order of arrangement and the serial numbers used, are found on page 38. The abbreviation V. M. denotes "various marks."

Serial No.	Commercial name.	Pounds.	Invoice value.	Serial No.	Commercial name.	Pounds.	Invoice value.
<b>NITROSO AND NITRO COLORS.</b>				<b>PYRAZOLONE COLORS.</b>			
4	Naphthol Green .....	19,146	\$2,902	19	Fast Light Yellow .....	33,514	\$10,272
7	Naphthol Yellow .....	250,409	24,702	20	Flavazine B. ....	19,000	4,927
<b>STILBENE COLORS.</b>				20a	Flavazine (V. M.) .....	62,375	10,700
9	Direct Yellow .....	71,399	11,295	22	Xylene Yellow .....	23,074	9,759
9a	Naphthamine Yellow (V. M.) .....	42,180	6,748	23	Tartrazine .....	266,781	53,137
9b	Direct Yellow (V. M.) .....	79,055	16,784	<b>AZO COLORS.</b>			
9g	Direct Yellow B. ....	26,123	2,766	33	Chrysoidine .....	63,303	8,585
10	Stilbene Yellow .....	50,477	7,464	34	Chrysoidine R. ....	105,946	16,852
10a	Stilbene Yellow EX. ....	34,588	6,305	37	Croceine Orange .....	11,366	1,535
11	Chloramine Orange .....	24,688	5,914	38	Orange G. ....	48,456	7,159
13a	Diphenyl Orange GG. ....	13,646	3,938	45	Brilliant Lake Red R. ....	31,674	2,337
14	Diphenyl Chrysoline .....	9,898	3,071	48	Alizarin Yellow .....	144,761	11,118
18	Diphenyl Fast Yellow .....	9,656	2,988	56	Autol Red .....	49,847	5,379
				58	Mordant Yellow .....	26,570	4,112
				58a	Alizarin Yellow (V. M.) .....	59,000	7,676
				58c	Orange 13, 14 .....	10,974	2,634

Serial No.	Commercial name.	Pounds.	Invoice value.	Serial No.	Commercial name.	Pounds.	Invoice value.
AZO COLORS—contd.				AZO COLORS—contd.			
61	Victoria Violet.....	47,126	\$10,998	247	Scarlet.....	36,598	\$4,228
63	Azo Acid Blue.....	44,258	8,544	257	Sulphon Cyanine.....	128,944	21,118
64	Lansfuchsin.....	69,045	9,375	257b	Tolyl Blue.....	16,750	2,967
66a	Amido Naphthol Red.....	36,000	25,970	265	Sulphon Cyanine Black.....	60,500	7,663
70	Brilliant Orange O.....	21,480	8,835	266	Naphthylamine Black.....	152,141	21,903
73	Hello Fast Red.....	13,413	2,141	269	Acid Black.....	34,662	5,765
73a	Lithol Fast Scarlet.....	36,295	9,287	269a	Naphthol Black (V. M.).....	131,890	19,436
80a	Wool Scarlet (V. M.).....	39,888	6,293	272	Brilliant Black.....	39,454	5,588
82a	Ponceau (V. M.).....	20,972	1,931	272b	Wool Black (V. M.).....	15,766	3,596
86a	Acid Anthracene Brown (V. M.).....	30,555	7,932	274	Diaminogen.....	805,944	56,201
96a	Chrome Fast Yellow.....	15,165	3,056	275	Diamond Black.....	351,582	55,020
102	Diamond Flavine G.....	23,089	4,226	275a	Chrome Black (V. M.).....	72,521	13,616
112	Bordeaux B.....	10,383	1,474	275c	Chrome Fast Black (V. M.).....	35,999	10,532
112a	Claret Red.....	14,288	1,291	277	Anthracene Acid Black.....	17,793	2,647
118	Geranine.....	18,917	6,090	279	Benzo Fast Scarlet.....	36,674	9,010
126a	Union Blue (V. M.).....	15,353	2,116	283	Bismarck Brown.....	27,576	6,352
132	Lake Red P.....	40,345	2,019	284	Bismarck Brown 2 R.....	170,882	31,241
134	Metanil Yellow.....	284,606	46,614	288	Palatine Chrome Black.....	18,965	1,607
137	Acid Yellow.....	35,982	6,312	296	Cotton Yellow.....	21,437	6,161
139	Orange IV.....	11,238	1,966	303	Renol Brilliant Yellow.....	12,786	3,200
140	Curcuma.....	39,269	6,257	303a	Paper Yellow (V. M.).....	284,443	45,320
141	Azo Yellow.....	59,994	13,755	304	Chrysophenine.....	148,406	40,466
141a	Azo Flavine (V. M.).....	20,114	3,151	307	Congo.....	12,040	1,687
141b	Indian Yellow (V. M.).....	10,837	2,392	308	Diazo Black.....	62,854	8,257
145	Orange II.....	127,550	10,116	312	Congo Corinth.....	39,748	6,030
146	Azo Fuchsin G.....	17,819	2,586	313	Congo Rubine.....	46,118	6,329
147	Azo Fuchsin 6 B.....	13,206	1,867	319	Diamine Scarlet.....	28,887	9,027
151a	Orange RO.....	90,174	7,395	326	Oxy Diamine Violet.....	11,514	1,938
152	Permanent Red 4 B.....	44,860	14,513	326a	Benzo Violet R.....	12,467	1,552
152a	Permanent Red (V. M.).....	56,545	7,403	327	Diamine Violet N.....	13,107	2,840
153	Lake Red C.....	306,607	9,495	333	Oxamine Black.....	417,423	57,464
154	Palatine Chrome Brown.....	18,264	4,674	333b	Diamine Black (V. M.).....	171,211	19,634
157	Diamond Black.....	285,047	37,055	333d	Develop Black.....	17,495	4,333
159a	Vigoureux Fast Black T.....	16,000	3,522	334	Diphenyl Blue Black.....	26,240	4,415
160	Fast Brown N.....	67,531	6,200	335	Naphthamine Black.....	47,969	7,132
161	Fast Red A.....	46,359	5,465	337	Benzo Blue.....	19,035	7,899
163	Azo Rubine.....	160,252	23,409	338	Naphthamine Blue.....	11,707	2,455
163a	Carmoisine (V. M.).....	17,107	2,427	343	Diamine Fast Red.....	47,724	17,131
163b	Chrome Blue (V. M.).....	53,404	19,874	344	Diamine Brown.....	63,716	12,457
164a	Diamond Blue R.....	20,117	3,800	346	Oxamine Red.....	11,636	2,568
168	Amaranth.....	73,973	9,420	348	Diphenyl Brown BN.....	13,471	4,015
168b	Wool Red (V. M.).....	11,497	2,285	358	Diphenyl Red.....	12,808	5,001
169	Cochineal Red.....	29,984	3,669	360	Pyramine Orange R.....	21,329	7,818
173	Lithol Red R.....	214,448	18,550	362	Oxydiamine Orange.....	19,905	4,223
173a	Lithol Red (V. M.).....	67,515	5,029	363	Benzo purpurine 4 B.....	341,724	45,233
174a	Scarlet.....	209,281	20,472	365	Benzo purpurine (V. M.).....	21,090	1,442
177	Mordant Yellow.....	86,003	11,280	366	Deltapurpurine 5 B.....	20,284	3,646
177a	Anthracene Yellow.....	16,050	3,011	370	Brilliant Congo.....	19,133	3,133
177b	Salicine Yellow.....	23,068	3,536	384a	Diamine Blue (V. M.).....	21,725	3,687
180	Erichrome Blue Black BC.....	43,890	8,485	392	Toluyene Orange.....	55,562	13,236
181	Salicine Black U.....	65,658	10,606	400	Acid Anthracene Red.....	17,560	5,174
181b	Salicine Black (V. M.).....	177,203	20,945	405	Benzo purpurine 10 B.....	47,708	11,181
183	Erichrome Black T.....	129,550	23,447	410	Benazurine (V. M.).....	78,699	21,018
184	Erichrome Black A.....	96,570	13,530	416	Brilliant Azurine 5 O.....	18,395	3,206
185	Anthracene Chrome Black.....	51,577	7,869	418	Diamine Brilliant Blue G.....	11,592	2,496
188	Sulphon Acid Blue R.....	45,038	11,372	419	Chicago Blue RW.....	15,176	3,364
189	Sulphon Acid Blue B.....	35,112	8,813	421	Oxamine Blue B.....	14,091	2,436
198	Thiazine Yellow.....	29,879	8,410	421a	Oxamine Blue (V. M.).....	21,800	8,749
211	Resorcin Brown.....	13,189	2,549	424	Chicago Blue 6 B.....	116,560	32,417
212a	Acid Brown.....	14,705	3,238	426	Benamine Pure Blue.....	21,322	5,663
217	Agalma Black 10 B.....	40,763	7,518	428a	Direct Blue (V. M.).....	21,322	5,366
217a	Agalma Black (V. M.).....	13,465	2,359	436	Columbia Black.....	290,902	41,563
217c	Naphthol Blue Black.....	62,864	8,864	436a	Dianol Black.....	112,085	12,633
217d	Naphthylamine Black (V. M.).....	122,681	12,240	442a	Direct Black (V. M.).....	145,788	11,831
217e	Acid Black (V. M.).....	47,489	7,547	449	Triumph Brown.....	10,781	5,255
217f	Amido Black (V. M.).....	105,005	10,062	455a	Columbia Black (V. M.).....	143,956	26,125
217g	Wool Black (V. M.).....	23,371	4,886	456	Benzo Fast Blue.....	73,926	20,607
217h	Acid Wool Black.....	13,618	4,202	456a	Benzo Fast Blue (V. M.).....	26,559	8,439
220	Palatine Black.....	148,203	15,169	462	Direct Deep Black E. W.....	32,830	5,032
220a	Amido Acid Black.....	32,624	3,614	462a	Direct Deep Black E.....	862,601	116,009
220b	Wool Black (V. M.).....	110,244	16,868	462c	Cotton Black (V. M.).....	91,485	22,206
227	Brilliant Crocine.....	123,058	20,333	462d	Union Black (V. M.).....	61,218	9,044
236	Wool Red.....	13,245	1,942				



Serial No.	Commercial name.	Pounds.	Invoice value.	Serial No.	Commercial name.	Pounds.	Invoice value.
AZO COLORS—contd.				UNCLASSIFIED AZO COLORS—continued.			
462f	Carbide Black (V. M.)	190,304	\$31,607	A242	Diazo Fast Black (V. M.) [By].....	29,330	\$7,476
463	Cotton Black E.....	248,567	24,603	A269	Direct Black (V. M.) [By].....	12,048	2,019
469	Chloramine Black.....	20,065	5,278	A266	Helo Bordeaux BL [By].....	14,703	793
469a	Chloramine Black (V. M.).....	19,505	3,961	A277	Orange RO [By].....	24,288	2,246
474	Oxamine Green B.....	23,832	5,134	A285	Phenylamine Black 4 B [By].....	14,066	1,619
474a	Diamine Green (V. M.).....	53,268	8,318	A286	Plato Black (V. M.) [By].....	30,010	6,084
476a	Benzamine Brown 3 G.....	16,968	2,470	A292	Plato Brown (V. M.) [By].....	14,580	2,542
477a	Naphthamine Brown (V. M.).....	48,734	9,452	A293	Alphanol Black (V. M.) [C].....	30,189	3,124
478	Columbia Green.....	24,749	4,723	A296	Azo Wool Violet (V. M.) [C].....	12,944	3,298
478a	Direct Green (V. M.).....	19,313	4,291	A246	Diamine Catechine (V. M.) [C].....	66,876	14,942
485a	Benzo Brown (V. M.).....	41,906	7,125	A251	Diamine Fast Blue (V. M.) [C].....	28,880	7,227
490a	Cotton Brown (V. M.).....	23,975	5,297	A255	Diamine Fast Orange (V. M.) [C].....	17,387	4,819
UNCLASSIFIED AZO COLORS.				A261	Diamine Jet Black (V. M.) [C].....	14,091	4,315
[The symbols denoting the manufacturers are enclosed in brackets (cf. p. 39).]				A262	Diamine Neron BB [C].....	36,982	6,204
A6	Chrome Fast Black (V. M.) [A].....	76,451	10,172	A267	Diamine Orange (V. M.) [C].....	17,068	2,851
A12	Columbia Brown (V. M.) [A].....	20,793	3,073	A368	Diamine Sky Blue FF [C].....	41,115	7,574
A16	Columbia Fast Blue (V. M.) [A].....	84,661	18,879	A382	Oxy Diamine Black (V. M.) [C].....	146,629	24,826
A28	Naphthogene Blue (V. M.) [A].....	23,847	6,824	A384	Oxy Diamine Brown (V. M.) [C].....	23,498	3,810
A32	Nerol (V. M.) [A].....	65,441	9,751	A385	Oxy Diamine Carbon (V. M.) [C].....	34,388	7,864
A44	Solamine Blue B [A].....	21,704	8,376	A387	Oxy Diaminogen (V. M.) [C].....	129,118	26,832
A46	Zambesi Black (V. M.) [A].....	629,350	107,069	A388	Para Diamine Black (V. M.) [C].....	18,634	2,060
A69	Corvan Black (V. M.) [B].....	10,083	1,870	A396	Cotton Black (V. M.) [K].....	200,473	44,567
A71	Cotton Black (V. M.) [B].....	24,505	4,843	A403	Salicine Blue B [K].....	16,224	8,449
A81	Lithol Fast Orange R [B].....	26,641	4,381	A414	Amido Naphthol Black 4 B, R K [M].....	10,750	1,219
A88	Oxamine Black (V. M.) [B].....	50,032	10,472	A418	Azo Acid Black (V. M.) [M].....	19,500	3,042
A95	Oxamine Brown (V. M.) [B].....	93,454	22,569	A430	Fast Mordant Blue B, R [M].....	17,000	4,612
A102	Oxamine Copper Blue RR [B].....	10,222	1,941	A437	Naphthalene Blue B, DL [M].....	28,000	5,102
A104	Oxamine Dark Blue (V. M.) [B].....	23,810	4,246	A439	Victoria Scarlet R, 3 R [M].....	22,400	2,379
A108	Oxamine Dark Brown G, R [B].....	10,599	1,312	A444	Direct Green (V. M.) [CG].....	31,194	5,091
A122	Palatine Chrome Blue BB [B].....	42,244	4,679	A451	Heligoland Black FFN [CG].....	25,132	4,151
A124	Palatine Chrome Green G [B].....	19,665	6,452	A469	Oxychrome Brown (V. M.) [GrE].....	10,490	2,235
A131	Scarlet (V. M.) [B].....	80,778	7,281	A472	Oxychrome Yellow (V. M.) [GrE].....	10,085	1,985
A142	Wool Scarlet (V. M.) [B].....	12,780	1,417	A478	Triazol Blue (V. M.) [GrE].....	10,148	1,580
A144	Acid Black E, M [By].....	18,660	2,031	A485	Triazol Brown (V. M.) [GrE].....	17,067	2,854
A147	Acid Chrome Black (V. M.) [By].....	39,508	8,062	A489	Triazol Dark Blue (V. M.) [GrE].....	19,489	2,647
A150	Acid Silk Black R [By].....	12,928	2,234	A515	Brilliant Scarlet 2 R, 4 R [tM].....	12,565	1,425
A157	Benzo Chrome Black Blue B [By].....	51,315	9,804	A524	Anthracyl Chrome Blue 2 B, D [tM].....	24,979	6,385
A166	Benzo Dark Green B, GG [By].....	13,038	2,123	A527	Croceine Scarlet MO, MOO [WD].....	12,210	2,235
A169	Benzo Fast Black L [By].....	100,268	22,846	A531	Acid Blue Black [AW].....	15,501	3,023
A176	Benzo Fast Holotropes (V. M.) [By].....	13,018	5,541	A532	Acid Chrome Blue [AW].....	12,952	4,365
A184	Benzo Green (V. M.) [By].....	16,506	2,850	A533	Acid Fast Green 8 B [AW].....	14,050	7,068
A191	Benzo Red 10 B, 12 B [By].....	19,420	4,715	A541	Diazogene Black (V. M.) [AW].....	30,042	6,814
A203	Benzo Rhoduline Red B, 3 B [By].....	11,878	1,813				
A210	Brilliant Fast Blue (V. M.) [By].....	11,553	3,309				
A215	Cashmere Black 3 BN, V [By].....	12,269	1,881				
A227	Diazo Brilliant Scarlet (V. M.) [By].....	38,909	14,210				

Serial No.	Commercial name.	Pounds.	Invoice value.	Serial No.	Commercial name.	Pounds.	Invoice value.
UNCLASSIFIED AZO COLORS—continued.				TRIPHENYLMETHANE COLORS—continued.			
A550	Direct Black ABC, C [AW].....	15,245	\$2,804	545a	Neptune Blue (V. M.)..	10,765	\$2,305
A552	Direct Chrome Brown [AW].....	12,178	2,665	545c	Brilliant Acid Blue (V. M.).....	10,120	3,525
A556	Drazaline Blue (V. M.) [AW].....	10,831	4,425	546	Cyanol.....	40,015	15,757
A566	Drazaline Brown (V. M.) [AW].....	21,756	4,979	551	Eriochrome Azurol BC.....	21,070	14,480
A593	Drazaline Sky Blue FF [AW].....	10,940	5,204	DIPHENYL-NAPHTHYLMETHANE COLORS.			
A600	Excelsior Black [AW]..	59,956	16,690	558	Victoria Blue R.....	109,627	33,117
A603	Hydrazol Black [AW]..	10,981	1,629	564	Naphthalene Green.....	22,144	5,904
A605	Hydrazol Chrome Black CB, DB [AW]..	51,694	7,499	565a	Wool Blue (V. M.)....	173,904	18,406
A612	Chicago Red III [G]....	13,195	2,420	566	Wool Green S.....	33,963	13,526
A617	Diphenyl Blue (V. M.) [G].....	12,677	3,842	566b	Cyanol Green (V. M.)..	10,988	2,193
A622	Diphenyl Deep Black (V. M.) [G].....	21,098	4,216	XANTHONE COLORS.			
A629	Diphenyl Green (V. M.) [G].....	18,021	4,667	571	Rhodamine 6 G.....	37,460	18,495
A664	Chlorantine Brown (V. M.) [I].....	18,267	4,034	573	Rhodamine B.....	56,339	23,777
A674	Chrome Fast Brown (V. M.) [I].....	12,204	3,550	576	Rhodamine 3 G.....	16,940	6,858
A682	Chrome Fast Green (V. M.) [I].....	12,943	6,670	580a	Fast Acid Violet (V. M.).....	19,811	13,975
A687	Cupranil Brown (V. M.) [I].....	24,851	4,859	587	Eosine.....	35,511	13,183
A692	Direct Black E [I].....	22,223	4,205	587a	Eosine (V. M.).....	21,017	7,891
A696	Direct Fast Black B [I].....	11,290	2,790	587b	Bromo-fluoresceic Acid	38,000	18,397
A711	Azo Rhodine 2 B [S]....	10,108	2,624	590a	Acid Eosine.....	17,499	7,388
A719	Direct Sky Blue FF [S].....	58,838	12,827	599	Galleine.....	15,404	8,817
A729	Azomine Milling Black N [CV].....	22,500	5,124	ACRIDINE COLORS.			
DIPHENYLMETHANE COLORS.				606	Phosphine.....	101,858	30,442
493	Auramine.....	449,276	107,887	606c	Patent Phosphine.....	28,627	17,881
TRIPHENYLMETHANE COLORS.				606g	Leather Flavine.....	24,153	8,235
495	Malachite Green.....	178,831	43,363	607	Rheonine.....	19,704	5,261
497a	Victoria Green.....	44,595	10,305	608	Euchrysine.....	15,403	5,343
499	Brilliant Green (V. M.)	73,904	16,345	609b	Diamond Phosphine..	30,336	5,897
502	Guinea Green.....	14,666	3,362	609e	Corioflavine.....	40,343	13,438
502a	Acid Green (V. M.)....	35,305	9,379	QUINOLINE AND THIOBENZENYL COLORS.			
503	Neptune Green (V. M.)	40,868	13,825	612	Quinoline Yellow (spirit soluble).....	79,553	28,170
505	Light Green (yellowish) (V. M.).....	24,946	5,960	613	Quinoline Yellow (water soluble).....	15,324	7,072
505a	Acid Green (V. M.)....	46,461	20,176	616	Primuline.....	56,212	8,478
506	Erioglaucine (V. M.)..	66,526	28,971	617	Columbia Yellow (V. M.).....	86,090	10,165
512	Magenta.....	87,102	25,659	617a	Diamine Fast Yellow (V. M.).....	88,688	12,972
515	Methyl Violet.....	255,063	63,183	618	Thioflavine T.....	31,714	17,683
516	Crystal Violet.....	33,653	13,664	OXAZINE AND THIAZINE COLORS.			
516a	Violet (V. M.).....	18,219	5,289	627	Gallocyanine.....	78,253	27,227
517	Benzyl Violet.....	22,387	6,013	649	Cotton Blue (V. M.)..	32,509	9,675
518	Ethyl Purple.....	51,933	23,101	659	Methylene Blue (V. M.)	185,738	72,619
521	Aniline Blue.....	50,563	18,586	660	Methylene Green (V. M.).....	30,812	13,196
524	Acid Magenta.....	19,098	4,030	661	Thionine Blue (V. M.)	18,618	7,873
527	Acid Violet.....	13,078	4,362	663	New Methylene Blue (V. M.).....	30,392	12,127
527a	Acid Violet (V. M.)..	16,106	5,360	667	Indochromine (V. M.)..	19,060	12,430
528	Fast Acid Violet 10 B.	12,919	3,229	AZINE COLORS.			
530	Acid Violet.....	50,055	12,806	672	Azo Carmine.....	17,500	5,453
530a	Acid Violet (V. M.)..	65,395	20,954	679	Safranine (V. M.)....	59,921	21,273
530b	Formyl Violet (V. M.)	19,819	4,185	681	New Fast Gray (V. M.)	29,507	10,436
530c	Guinea Violet 4 B, 6 B.	18,854	5,114	697	Induline, soluble in spirit (V. M.).....	25,342	5,016
531	Eriocyanine.....	25,081	11,987	698	Nigrosine, soluble in spirit (V. M.).....	186,640	23,435
534a	Acid Violet (V. M.)..	19,960	6,310	699	Induline, soluble in water (V. M.).....	21,775	5,514
536	Alkali Blue.....	286,531	117,365	700	Nigrosine, soluble in water (V. M.).....	394,718	58,903
537a	Nary Blue (V. M.)....	31,499	6,275	705a	Indocyanine B, 2 R.F..	23,138	5,205
538a	Cotton Blue (V. M.)..	45,019	9,809				
539	Soluble Blue.....	86,523	31,083				
543	Patent Blue.....	114,631	49,945				
543c	Acid Blue.....	14,467	4,916				
545	Patent Blue A.....	40,848	10,229				

## SUMMARY OF MOST IMPORTANT COLORS IMPORTED.

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Serial No.	Commercial name.	Pounds.	Invoice value.	Serial No.	Commercial name.	Pounds.	Invoice value.
<b>SULPHUR COLORS.</b>				<b>UNCLASSIFIED SULPHUR COLORS—contd.</b>			
708	Sulphaniline Brown O. R.	11,327	\$1,158	S100	Thiogene Brown (V. M.)	97,551	\$10,601
710	Immedial Yellow D (V. M.)	13,395	2,266	S109	Thiogene Deep Blue	13,106	3,049
717	Vidal Black	7,495	525	S155	Pyrogene Brown (V. M.)	63,450	6,689
719	Thional Black G	16,865	2,141	S168	Sulphur Bronze	15,152	1,392
720	Sulphur Black (V. M.)	502,309	54,557	S177	Cross Dye Drab N	15,758	1,324
720[A]	Sulphur Black (V. M.)	3,703,979	368,939				
720[B]	Kryogene Black (V. M.)	121,904	12,263				
720	Katigene Black (V. M.)	34,699	2,711		<b>ANTHRAQUINONE AND ALLIED COLORS.</b>		
[B]	Katigene Blue Black			760	Indanthrene Gold Orange G.	20,092	10,088
720	4 BPA	49,310	4,084	761	Indanthrene Gold Orange	50,496	2,052
[B]	Katigene Deep Black			763	Indanthrene Dark Blue B.O.	11,096	2,516
720	B	224,262	19,491	765	Indanthrene Green B.	72,227	16,377
[B]	Immedial Brilliant			767	Indanthrene Violet RR	68,419	21,516
720[C]	Carbon F. F.G.	113,900	15,197	768a	Indanthrene Black B, BB	50,034	12,876
720[K]	Sulphur Black (V. M.)	323,715	32,084	774	Alizarin Black S, SR, WR	136,461	9,938
720[K]	Thion Black (V. M.)	12,817	1,275	774b	Alizarin Black (V. M.)	61,187	19,239
720[K]	Thion Violet Black A.	19,860	3,471	778	Alizarin (synthetic)	202,392	20,465
720[M]	Thiogene Black (V. M.)	83,089	7,034	779	Alizarin Orange (V. M.)	14,239	3,184
720	Thiophor Black WLN	10,141	1,424	780	Alizarin Red	53,154	24,784
[C]	Thioxine Black (V. M.)	143,471	11,254	780a	Alizarin Red (V. M.)	28,775	3,708
720	Eclipse Black C.	2,756	421	782	Alizarin Brown (V. M.)	110,211	30,907
[GrE]	Pyrogene Deep Black (V. M.)	13,011	1,724	785a	Alizarin (V. M.)	49,021	5,379
720[G]	Pyrogene Deep Black (V. M.)			789	Anthracene Blue WR	107,778	13,622
720[I]	Sulphur Black TR.	27,394	1,937	790a	Anthracene Blue (V. M.)	22,444	7,174
[Lev]	Thionol Black S, XX.	6,498	550	800	Anthracene Blue WB, WG	54,712	9,228
720[H]	Cross Dye Black	33,583	4,789	803	Alizarin Blue WX, A.	16,575	6,453
722	Auronal Black (V. M.)	50,879	5,072	803a	Alizarin Blue (V. M.)	302,319	69,712
724	Immedial Black	51,099	6,193	804	Alizarin Blue S	19,679	69,871
	<b>Total for all sulphur blacks</b>	<b>5,615,458</b>	<b>558,909</b>	804a	Alizarin Blue SB, 942	12,409	6,158
725	Immedial Brown (V. M.)	23,887	2,558	804c	Alizarin Sky Blue B.	19,471	24,555
726	Pyrogene Blue (V. M.)	10,934	2,582	805	Alizarin Green S	15,885	2,497
730	Pyrogene Black G	8,725	1,140	806a	Alizarin Black (V. M.)	229,500	33,275
734	Pyrogene Yellow M.O	18,515	5,102	807	Alizarin Black S	198,491	19,902
735	Pyrogene Indigo (V. M.)	22,661	6,652	807a	Patent Alizarin Black (V. M.)	61,500	10,049
739	Immedial Maroon B.	15,496	2,855	808	Alizarin Green S	11,096	2,337
746	Katigene Green (V. M.)	63,929	9,950	808a	Alizarin Green (V. M.)	124,095	58,491
748	Hydron Blue G, R.	292,729	33,555	810a	Helindone Yellow CG	20,744	6,954
750	Kryogene Brown A, G.	10,313	972	820	Algol Brilliant Violet R	12,784	3,623
	<b>UNCLASSIFIED SULPHUR COLORS.</b>			827	Indanthrene Claret B.	28,728	9,923
83	Sulphur Blue (V. M.)	73,434	15,489	832	Indanthrene Violet RN	11,667	5,181
812	Sulphur Brown (V. M.)	79,691	9,505	833	Algol Olive R.	13,334	2,850
818	Sulphur Catechu G, R.	48,973	5,071	838	Indanthrene Blue RS	187,379	56,532
826	Sulphur Indigo (V. M.)	10,488	2,085	841	Indanthrene Blue GGS	10,163	4,284
837	Katigene Black Brown (V. M.)	11,006	1,336	842	Indanthrene Blue GCD paste	478,980	169,780
845	Katigene Brown 2 R, V	22,811	2,452	849	Indanthrene Yellow G, GP	12,683	4,353
849	Katigene Direct Blue B, RF	11,299	2,305	849a	Indanthrene Violet Yellow GP	62,509	20,738
851	Katigene Indigo (V. M.)	42,157	5,924	850a	Indanthrene Blue WR	31,658	4,272
855	Katigene Khaki G	14,242	1,691	851a	Alizarin Direct Blue (V. M.)	10,201	11,878
858	Katigene Red Brown R, 3 R	68,864	9,386	856a	Alizarin Rubinol R	10,917	11,876
862	Katigene Yellow G, GG, GR	55,227	9,318	859	Cyananthrol R	18,792	27,555
865	Katigene Yellow Brown (V. M.)	36,826	5,617	862	Alizarin Blue Black B, 3 B	54,706	61,370
875	Immedial Direct Blue (V. M.)	73,892	11,145		<b>INDIGO AND ITS DERIVATIVES.</b>		
876	Immedial Indogene (V. M.)	90,077	13,141	874	Indigo, synthetic	8,507,359	1,090,773
878	Immedial New Blue G	37,492	10,016	877	Indigo Extract	19,329	6,577
884	Sulphur Brown	12,735	1,926	879	Indigo MLB	53,610	11,604
886	Thion Brown (V. M.)	18,579	2,824	881	Ciba Blue 2 B	16,880	7,423
897	Thiogene Blue (V. M.)	14,344	2,261				

Serial No.	Commercial name.	Pounds.	Invoice value.	Serial No.	Commercial name.	Pounds.	Invoice value.
	INDIGO AND ITS DERIVATIVES—continued.				UNCLASSIFIED COAL-TAR COLORS—contd.		
886	Brilliant Indigo G.D....	12,057	\$1,747	U283	Brilliant Scarlet (V. M.) [C].....	41,082	\$4,317
888	Indigo M.L.B. T.....	12,730	1,598	U290	Leather Black (V. M.) [C].....	11,784	3,063
901	Ciba Violet B.....	19,830	6,975	U293	Nerazine G. GA [C].....	44,676	8,484
904	Helindone Brown G....	12,936	6,710	U304	Acid Red (V. M.) [C].....	30,099	6,238
907	Ciba Scarlet G.....	22,265	11,479	U321	Carpet Red B, BT, R [K].....	15,445	1,649
910	Helindone Pink (V. M.).....	39,393	47,117	U329	Cotton Brown (V. M.) [K].....	15,079	4,959
913	Helindone Orange R....	14,489	5,841	U332	Cotton Marine Blue #678 [K].....	79,035	10,902
918	Helindone Red 3 B....	27,874	10,942	U333	Cotton Orange (V. M.) [K].....	21,665	5,116
920	Helindone Violet B, 2 B, R.....	28,607	15,945	U335	Direct Black (V. M.) [K].....	42,277	8,438
923	Ursol.....	53,720	15,779	U336	Direct Blue (V. M.) [K].....	57,224	14,318
	UNCLASSIFIED COAL-TAR COLORS.			U337	Direct Brown (V. M.) [K].....	21,828	4,799
	[The following dyes include imported artificial colors, the composition or manufacture of which are not known, and which have not been mentioned among the unclassified azo colors and sulphur colors.]			U361	Naphthamine Fast Black SE, SDE, VE [K].....	34,203	10,671
U20	Guinea Bordeaux (V. M.) [A].....	23,252	3,233	U378	Paper Scarlet (V. M.) [K].....	24,372	3,101
U24	Indo Violet BF [A]....	23,060	4,647	U385	Scarlet (V. M.) [K].....	29,684	3,363
U27	Metachrome Blue B, G [A].....	14,301	3,996	U390	Wool Black (V. M.) [K].....	118,791	20,453
U31	Metachrome Brown B.L, BRL [A].....	57,313	7,271	U391	Wool Blue (V. M.) [K].....	23,020	6,854
U61	Scarlet 53446 [A].....	13,344	1,246	U393	Wool Brown (V. M.) [K].....	40,736	6,333
U64	Amine Black (V. M.) [A].....	146,163	14,390	U394	Wool Cerise SR [K]....	16,088	2,359
U78	Chrome Fast Blue 4 B [A].....	23,585	5,198	U395	Wool Green [K].....	20,255	5,488
U86	Columbia Fast Black (V. M.) [A].....	82,040	15,756	U397	Wool Violet R, SL [K].....	12,584	3,429
U100	Basic Kraft Brown Y 2 [B].....	11,235	2,039	U899	Wool Yellow (V. M.) [K].....	17,465	2,629
U109	Brilliant Scarlet (V. M.) [B].....	23,382	2,588	U423	Alizarin Pure Blue DPH [M].....	31,000	7,349
U121	Corvoline BT [B].....	10,789	3,241	U440	Hansa Yellow G, 5 G, R [M].....	11,014	4,559
U138	Fast Acid Marine Blue HBBX [B].....	25,567	6,212	U460	Paratol Chrome Yellow L [M].....	17,396	1,238
U145	Japan Black (V. M.) [B].....	13,974	2,766	U465	Paratol Scarlet 3 B [M].....	41,000	8,271
U151	Jet Black APX, RR [B].....	19,442	4,779	U470	Rosazaine B, B 5, 6 G [M].....	17,500	8,536
U155	Kraft Brown L, Y 2 [B].....	43,807	10,218	U510	Cresol Black (V. M.) [GrE].....	37,322	4,246
U158	Leather Black BO, CR [B].....	16,433	4,843	U526	Chrysolarine A [tM]....	15,756	6,575
U163	Oil Black 6 B, 6 G, HG [B].....	28,603	4,258	U553	Black BH, HB [AW]....	21,239	4,789
U180	Pigment Black [B]....	22,448	926	U570	Developed Black B, N, R, W [AW].....	36,475	9,501
U183	Quercitron Substitute WBL, V [B].....	16,812	2,422	U610	Erio Violet BC, RLC [G].....	21,345	6,117
U192	Thiazine Brown R [B].....	12,105	2,809	U682	Sepia Black FW [I]....	10,527	2,367
U206	Acid Chrome Blue 3 G, 2 R, 3 R [By]....	25,633	6,553	U687	Solfegene Deep Black (V. M.) [I].....	61,949	9,509
U217	Blue 27071 [By].....	14,775	994	U695	Blue (V. M.) [S].....	13,657	3,627
U238	Claret Lake BL [By]....	15,290	949	U701	Calcutta Blue 2 [S]....	26,669	4,669
U246	Half Wool Blue 3 R [By].....	20,610	3,790	U708	Meridian Black AE, AN [S].....	15,157	3,316
U271	Wool Fast Blue BL, GL [By].....	19,238	6,331	U711	Omega Chrome Cyanine R [S].....	21,001	3,019
U279	Brilliant Lansfuchsine (V. M.) [C].....	11,289	1,757	U716	Alpha Black JC, 6 BN [CV].....	12,100	2,949
				U731	Cachou (V. M.) [Lew]....	56,991	3,430
				U744	Alizadine Black M [H]....	18,979	1,988
				U799	Black (V. M.) [H].....	138,805	14,781
				U770	XL Blue (V. M.) [H]....	10,047	2,126

## PRICES OF DYES.

The values of the different colors imported from Europe are taken directly from the invoice entries. The prices varied but little during the course of the fiscal year 1913-14. They are on file in the Bureau of Foreign and Domestic Commerce. It did not seem necessary to reproduce them in full in the enumeration of colors. The average price for the year, in the case of any dye imported under a variety of marks or designations, is easily ascertained by a simple act of division.

In most cases the values stated represent the lowest possible estimate of wholesale cost which can be placed upon the wares in question. The bulk of the importations is shipped from the great manufacturing firms of Germany, Switzerland, and England to their agents in this country. The latter are ordinarily incorporated American companies, bearing essentially the same names as the European houses which they represent, and some are practically under the control of the latter, if not financed by them directly.

Under these circumstances and in view of the exceptional difficulty of ascertaining market prices for the highly differentiated gradations of quality in the thousands of brands of artificial colors, there is a strong temptation to place the lowest possible estimate of value upon wares subject to an ad valorem duty of 30 per cent.

It is doubtful in some cases, therefore, whether the values published in the following lists are fully equal to those against which American manufacturers of colors would contend, should all the factors falling under the head of "unfair competition" be eliminated in the international trade in synthetic dyes.

In these values there is a slight element of variability and uncertainty, based upon the lack of uniformity in invoicing colors. In some cases—probably the majority—the prices and values are net, not covering charges for containers and packing, freight and insurance to seaport, consular certification, minor shipping charges at point of departure and at seaport. Wares shipped by the "Badische Co.," the Berlin "Actien-Gesellschaft," the "Cassella Co.," the "Griesheim-Elektron," and the "Chemikalienwerk-Griesheim" are usually invoiced in this manner.

Other firms, such as the "Bayer Co.," the "Sandoz Co.," "Carl Jäger," and "Beyer & Kegel," include in their prices the cost of containers and packing, freight and insurance to seaport, consular certification, and minor shipping charges. In other words, their prices are f. o. b. ocean steamers at Hamburg, Bremen, Rotterdam, Antwerp, etc.

It has not been possible, on account of time limitations, to estimate this small factor in the case of each shipment and make the accompanying correction in value so as to have actual uniformity in the basis of valuation. The element of quantity is the dominant feature in this work, and in view of what is stated above, very elaborate calculations in this connection would be of doubtful utility.

## COST OF PACKING, FREIGHT, INSURANCE, ETC.

It is well, however, to know with some approximation to exactness the extent and nature of the charges incident to the importation of European coal-tar colors into the United States. They are as follows:

1. *Consular certification*.—A fee of \$2.50 for all invoices covering shipments the value of which exceeds \$100.

2. *Freight to seaport*.—This is quite variable, depending upon the distance to be traversed and whether rail or water transportation is employed. Rates per pound (net) of color are \$0.00125 from Berlin; \$0.0056 to \$0.0071 from Basel; \$0.0008 to \$0.00216 for points on the Rhine.

3. *Insurance, in transit to seaport*.—Rates vary from \$0.0007 to \$0.0016 for each dollar of invoice value.

4. *Shipping charges*.—The item appears occasionally. It ranges from \$1 to \$2 for each \$1,000 of an invoice.

5. *Ocean freight*.—Customary rates from European ports, such as Hamburg and Antwerp to New York, were, prior to the war, \$9.75 per metric ton, gross weight, for most of the coal-tar dyes, and \$7.91 for certain categories, such as sulphur black and other sulphur colors.

Several large invoices of colors showed an average rate for ocean freight per net pound of dyestuff, of \$0.00471, ranging from \$0.004125 to \$0.00539. Through freight from Frankfort to New York on a large and varied assortment of artificial dyes was at the rate of \$0.00755 per net pound of colors.

On an average, 1 pound of color, net, is represented by 1.165 pounds gross weight; the tare per pound ranging from 0.155 to 0.174 pound on shipments of some size.

6. *Marine insurance*.—Insurance on large shipments of dyes from Frankfort to New York, covering both inland and marine insurance, was equivalent to \$0.000916 per net pound of colors. This represented \$0.00497 on each dollar of value, or about one-half of 1 per cent on the value. Shipments by another company, located on the Rhine, averaged one-third of 1 per cent.

7. *Packing*.—There is some diversity in the average cost of containers. This item ranges from \$0.00459 to \$0.00863 per net pound of color in a number of large invoices. A fair average would be \$0.00651 per net pound.

Some of the more expensive colors are shipped in tin boxes, packed in cases holding 100 pounds, net. Cases cost \$0.48. The charges for tins are as follows: 1 pound, 4.8 cents; 5 pounds, 9.6 cents; 10 pounds, 15.5 cents; 25 pounds, 32 cents. Kegs, containing 100 pounds, cost usually \$0.95, but range in value from \$0.63 to \$1.14. Casks hold ordinarily about 500 pounds. The net contents range, however, from 415 to 595 pounds. In four large shipments the average net weights were 442, 469, 480, and 531 pounds. The general average was 480 pounds. The average price of casks is \$1.90. They range, however, in cost from \$1.55 to \$3.24.

On an average the importation of European colors to New York costs \$0.014 per net pound for packing and transportation (packing \$0.0065, transportation \$0.0075), and \$7 per \$1,000 of value for insurance and incidental charges (insurance \$5, shipping charges and consular certification \$2).

American consumers of coal-tar colors, who may wish to compare the prices paid by them two or three years ago for European wares with the prices based upon the values furnished in this report, can add to the prices calculated from these values the cost of the above items. In addition there comes the duty of 30 per cent ad valorem

on all artificial colors, except indigo and its derivatives, and colors made from anthracene (chiefly alizarin) and carbazole, which were exempt from duty under the tariff of October 3, 1913. This duty is levied upon the combined cost of a dye and its containers. Furthermore, the normal cost of handling, storing, and distributing, in the importing houses, is to be added. The difference between the sum total of these various items and the current price for a given color, represents the profit made by the importer.

## ARTIFICIAL COLORS MANUFACTURED IN THE UNITED STATES.

The manufacture of coal-tar colors in the United States has been in existence for some 37 years. Prior to 1915 it had never become a factor of importance in supplying the American market. The reasons for this slowness of development have been presented in detail in the monograph published in 1915 by the Bureau of Foreign and Domestic Commerce, entitled "Dyestuffs for American Textile and other Industries" (Special Agents Series No. 96).

The American manufacture was confined almost entirely to the "assembling" into finished dyes of coal-tar intermediates imported from Europe, chiefly from Germany. In its entirety it represented less than one-tenth of the activity to be encountered in any one of the larger companies producing synthetic colors in Germany and Switzerland

### STATUS OF THE DOMESTIC PRODUCTION IN 1914.

The status of the industry for the calendar year 1914, is shown by the following tabular statement prepared by the Bureau of the Census:

Number of establishments.....	7
Persons engaged in manufacture.....	528
Salaried employees.....	130
Wage earners (average number).....	398
Primary horsepower.....	1, 376
Capital.....	\$3, 386, 212
Services.....	\$529, 076
Salaries.....	\$273, 632
Wages.....	\$255, 437
Materials.....	\$1, 936, 982
Value of products.....	\$3, 596, 795
Coal-tar colors—	
Pounds.....	6, 619, 729
Value.....	\$2, 470, 096
All other.....	\$1, 126, 699
Value added by manufacture.....	\$1, 659, 813

The scope and extent of the manufacture carried on prior to the war by the seven American companies engaged in this branch are summarized under their respective names. No attempt has been made to estimate the annual output of the individual colors made in the American factories, as it fluctuated largely from year to year.

In nearly all cases the character of the manufacture has been vastly affected by the conditions prevailing since 1914. As a rule the variety of colors has been diminished while the output has been vastly augmented.

<sup>1</sup> Includes medicinal coal-tar products valued at \$174,508.

The number of employees has been notably augmented. In general, it has been quintupled. In one case the force is 50 times greater than in 1914.

#### THE SCHOELLKOPF ANILINE & CHEMICAL WORKS (INC.).

This firm, located at Buffalo, N. Y., was founded in 1879, and is the oldest American company in this industry. A number of dyestuffs in current use originated in its laboratories. It has shown a commendable degree of enterprise in maintaining its position for over a third of a century, frequently under conditions of a most discouraging nature. It has also earned the grateful recognition of a multitude of American consumers of dyes by swiftly enlarging the capacity of its works so as to alleviate materially the severity of the dyestuff famine to which our textile and allied interests have been exposed during the past two years.

The annual output of this firm constituted about one-half of the American production of coal-tar dyes. The following colors were currently manufactured before the war. The serial numbers correspond to those given in Schultz's "Farbstofftabellen."

##### STILBENE AND PYRAZOLONE DYES.

- 9. Direct Yellow F.
- 9. Direct Yellow 2 RF.
- 23. Wool Yellow extra conc.

##### AZO DYES.

- 31. Oil Yellow A.
- 32. Oil Yellow 2625.
- 33. Chrysoidine Y extra.
- 33. Chrysoidine crystals.
- 34. Chrysoidine 3 R.
- 36. Oil Orange 2311.
- 36a. Oil Yellow 2338.
- 37. Croceine Orange Y.
- 38. Crystal Orange 2 G.
- 64. Buffalo Fast Crimson G.
- 66. Buffalo Fast Crimson R.
- 68. Oil Yellow 2681.
- 70. Croceine Orange R.
- 82. Xylidine Scarlet.
- 83. Cumidine Scarlet.
- 94. Buffalo Flamme B.
- 95. Buffalo Flamme G.
- 105. Sudan Brown S.
- 110. Buffalo Rubine.
- 112. Azo Bordeaux.
- 126. Indoine Blue.
- 134. Metanil Yellow.
- 141. Azo Yellow.
- 141. Azo Yellow A 5 W.
- 143. Resorcin Yellow.
- 145. Orange A.
- 147. Buffalo Fast Fuchsine B
- 151. Orange R.
- 161. Fast Red conc.
- 161. Fast Red S conc.
- 163. Azo Rubine extra.
- 168. Wool Red 40 F.
- 169. Brilliant Scarlet 3 R.

##### AZO DYES—continued.

- 188. Buffalo Fast Blue R.
- 189. Buffalo Fast Blue B.
- 211. Resorcin Brown.
- 211. Leather Orange.
- 217. Buffalo Black NB.
- 220. Buffalo Black PY extra.
- 227. Croceine Scarlet MOO.
- 257. Buffalo Cyanine R.
- 257. Buffalo Cyanine 3 R.
- 261. Buffalo Black 8 B, 10 B, R.
- 266. Buffalo Black AD.
- 268. Buffalo Black EA.
- 269. Buffalo Black 4 B.
- 272. Buffalo Black 2 B.
- 275. Buffalo Chrome Black BWN.
- 283. Bismarck Brown Y.
- 284. Bismarck Brown 53.
- 303. Brilliant Yellow C.
- 307. Congo Red 4 B.
- 311. Erie Orange 2 R.
- 312. Buffalo Direct Garnet R.
- 313. Buffalo Direct Crimson B.
- 320. Bordeaux extra.
- 326. Niagara Violet 2 B.
- 326. Niagara Blue R.
- 327. Niagara Violet 3 R.
- 333. Diazine Black H extra.
- 336. Niagara Blue GW, HW, RW.
- 337. Niagara Blue B, 2 B.
- 342. Buffalo Direct Violet CG extra.
- 343. Niagara Fast Red FD.
- 344. Erie Direct Brown 3 RB.
- 362. Buffalo Direct Orange R.
- 363. Buffalo Direct Red 4 B.
- 375. Buffalo Direct Violet 4 R.
- 386. Niagara Blue BR.
- 392. Buffalo Direct Orange Y.
- 394. Buffalo Direct Yellow CRR extra.
- 405. Buffalo Direct Cardinal 7 B.



**AZO DYES—continued.**

- 410. Buffalo Direct Blue G extra.
- 424. Niagara Blue 6 B.
- 426. Niagara Blue 4 B.
- 436. Panama Black R extra.
- 436. Panama Black 3 G extra.
- 441. Niagara Black Blue R.
- 462. Erie Direct Black G extra
- 463. Erie Direct Black R extra
- 464. Erie Direct Green ET.
- 464. Erie Direct Green WT.
- 474. Erie Direct Green MT.
- 477. Erie Direct Brown GR.
- 477a. Erie Direct Brown GB.
- 488. Erie Direct Brown RF, 2 RF.

**TRIPHENYL-METHANE DYES.**

- 512. Fuchsine.
- 512. Fuchsine TR.
- 513. Fuchsine NB.

**TRIPHENYL-METHANE DYES—continued.**

- 521. Spirit Blue, red shades.
- 521. Spirit Blue, green shades.
- 524. Acid Magenta.
- 536. Alkali Blue, red shades.
- 536. Alkali Blue, green shades.
- 537. Paper Blue, red shades.
- 537. Paper Blue, green shades.
- 537. Paper Blue 6 G super.

**XANTHONE DYES.**

- 587. Eosine.

**AZINES.**

- 679. Safranine Y extra.
- 680. Safranine 6 B.
- 684. Brilliant Safranine R.
- 699. Nigrosines from aniline (Induline).
- 700. Nigrosines from nitrobenzol.

**THE HELLER & MERZ CO.**

This firm, located at Newark, N. J., stands second in point of seniority and importance. Its annual output of coal-tar colors was estimated at slightly less than one-quarter of the country's production. It has catered very largely to the needs of the paper trade. In addition to organic dyestuffs, it has manufactured large quantities of mineral colors, notably ultramarine. The equipment for the production of coal-tar dyes has been largely augmented during the past year.

The following artificial colors were currently manufactured in 1914 (serial numbers of Schultz's "Farbstofftabellen"):

**AZO DYES.**

- 33. Chrysoidine.
- 145. Orange II.
- 283. Bismarck Brown.

**TRIPHENYL-METHANE DYES.**

- 512. Fuchsine.
- 515. Methyl Violet.
- 536. Alkali Blue.
- 537. Soluble Blue.

**TRIPHENYL-METHANE DYES—continued.**

- 538. Methyl Blue.
- 539. Acid Blue.

**ANTHONE DYE**

- 587. Eosine.

**AZINES.**

- 698. Nigrosine, spirit soluble.
- 700. Nigrosine, water soluble.

**THE BAYER CO. (INC.).**

This company owns works at Rensselaer, N. Y., where several of the staple colors and medicinal products of the Farbenfabriken vormals Friedr. Bayer & Co., of Leverkusen, Germany, are manufactured on a scale of some importance. The output of coal-tar dyes prior to the war constituted somewhat less than one-fifth of the country's production. The expansion during the past year and a half has not been as pronounced as in the case of the other establishments.

Prior to the war the company manufactured the following colors:

AZO DYES.	AZINES.
33. Chrysoidine.	698. Nigrosine, spirit soluble.
283. Bismarck Brown.	699. Induline.
	700. Nigrosine, water soluble.
TRIPHENYL-METHANE DYES.	
512. Fuchsine.	
536. Alkali Blue.	
537. Soluble Blue.	

#### W. BECKERS ANILINE & CHEMICAL WORKS (INC.).

This company, founded in 1912, is located at Brooklyn, N. Y. Prior to the war it specialized on alizarin substitute colors. The annual output was modest, estimated at about 180 tons. During the past 18 months the plant has been rapidly enlarged. To-day it is second in importance as a factor in the domestic industry.

The following colors were manufactured regularly prior to 1915:

AZO DYES.	AZO DYES—continued.
48. Alizarin Yellow FF.	342. Direct Yellow WB.
83. Ponceau 3 R.	410. Benzazurine WB.
145. Orange II.	426. Direct Sky Blue B.
163. Azo Rubine WB.	
166. Fast Red A.	XANTHONE DYES.
188. Acid Fast Blue SR.	599. Chrome Blue R, paste and powder.
189. Acid Fast Blue SB.	
217. Acid Black 10 B.	OXAZINE DYES.
333. Diazo Black BHN.	626. Chrome Blue B, paste and powder.
337. Direct Blue WBB.	

#### THE CENTRAL DYESTUFF CO.

This company, located at Newark, N. J., was founded in 1898. The output was not large; possibly 4 per cent of the country's production. It included, however, several dyes of importance for the textile industries. The plant has been notably enlarged during the past year.

Prior to the war the following colors were currently manufactured:

AZO DYES.	
31. Amido-azo-benzene.	168. Amaranth.
33. Chrysoidine.	174. Scarlet.
37. Croceine Orange.	223. Sudan III.
68. Amido-azo-toluene.	232. Sudan IV.
112. Bordeaux B.	283. Bismarck Brown.
145. Orange II.	
161. Fast Red.	AZINES.
163. Azorubine.	697. Induline.
	698. Nigrosine.

#### THE CONSOLIDATED COLOR & CHEMICAL CO.

This company, located also at Newark, N. J., manufactured for some years prior to the war less than 100 tons annually of colors. The following dyes for textile works were currently produced:

58. Alizarin Yellow R.	144. Naphthol Orange.
168. Fast Red.	

In addition, a small variety of colors for pigments, especially alizarin, para, and scarlet lakes, and for use in paper making were regularly manufactured. During the past year the plant has been greatly enlarged. It is at present an important center of production.

#### HUB DYESTUFF & CHEMICAL CO.

This company, located at South Boston, Mass., manufactured on a modest scale, for a few years prior to 1915:

58. Alizarin yellow R.

#### IMPORTATION OF COAL-TAR CRUDES AND INTERMEDIATES.

As stated above, the synthetic colors manufactured in the United States prior to 1915 were made almost exclusively from intermediate coal-tar products imported from Europe. Germany was the chief source. A considerable amount, however, was of British origin.

A single noteworthy exception is found in the case of aniline. The American manufacture of this all important intermediate was organized in 1910. The annual output had attained about 900 short tons in 1914—the product of a single establishment. At present aniline is regularly manufactured by over 30 companies and the annual output is in excess of 16,000 short tons.

In connection with the preceding enumeration of the artificial dyes currently produced in the United States prior to the war, it is of considerable importance to know what coal-tar crudes and intermediates were imported for use in their manufacture and, further, the quantity and value of each crude and intermediate. This information is furnished in the following tabular statement based upon the importations for the fiscal year ending June 30, 1914:

#### IMPORTS OF COAL-TAR CRUDES, FISCAL YEAR 1913-14.

	Pounds.	Value.		Pounds.	Value.
Benzene.....	131,211	\$4,247	Phenol (carbolic acid).....	8,393,216	\$531,535
Toluene.....	199,088	7,892	Phenol, ref.....		109,146
Xylene.....	30,681	1,722	Cresol.....	404,361	16,139
Naphthalene.....	3,880,108	70,428	Creosote oil.....	59,271,677	3,822,919
Anthracene and anthracene oil.....		32,175	Total.....		4,506,203

<sup>a</sup> Gallons.

An exceedingly small part of the above-mentioned products was utilized in the manufacture of artificial colors. The creosote oil was employed in the preservation of timber. The phenol served chiefly as a disinfectant and antiseptic. The chief use of naphthalene was in the familiar form of "moth balls."

During the calendar year 1913, according to official German records, the following coal-tar crudes were imported into the United States from Germany: Naphthalene, 798 short tons; carbolic acid (pure and crude), 1,320 short tons; cresol, 220 short tons; creosote oil, 17,600 short tons.

## IMPORTS OF COAL-TAR INTERMEDIATES, FISCAL YEAR 1913-14.

[NOTE.—The values given are net invoice values of European manufacturers and do not include cost of containers, etc.]

Intermediates.	Pounds.	Value.	Intermediates.	Pounds.	Value.
<b>NITRO COMPOUNDS.</b>			<b>DIAMINES AND DERIVATIVES—continued.</b>		
Nitro-benzene.....	1,087,911	\$59,835	m-Toluylene-diamine.....	133,355	\$25,582
Dinitro-benzene.....	164,660	10,399	m-Toluylene-diamine-sulphonic acid (1.2.4.6).....	2,277	835
Nitro-toluene.....	6,670	359	Benzidine.....	55,245	16,991
o-Nitro-toluene.....	42,482	2,969	Dianisidine.....	10,656	4,217
Dinitro-toluene.....	547,701	36,660			
Trinitro-toluene.....	57,242	13,242	<b>PHENOLS AND DERIVATIVES.</b>		
α-Nitro-naphthalene.....	2,247	165	Salicylic acid.....	18,321	4,425
m-Nitraniline.....	3,527	1,037	Acetyl-salicylic acid.....	22,541	11,572
p-Nitraniline.....	506,931	67,638	Resorcin.....	61,624	18,175
Methyl-nitraniline.....	500	135	Hydroquinone.....	66,596	25,140
Nitro-toluidine.....	10,874	3,415	Pyrogallol.....	23,615	20,476
m-Nitro-p-toluidine.....	10,513	4,200	Gallie acid.....	61,635	20,439
o-Nitro-p-toluidine.....	20,737	6,524	Naphthols (α and β).....	70,469	4,193
p-Nitro-p-toluidine.....	30,042	9,723	α-Naphthol.....	44,069	2,271
p-Nitro-phenol.....	4,780	774	α-Naphthol-5-sulphonic acid (L or Cleve's acid; 1.5).....	25,126	5,026
<b>CARBOXYLIC ACIDS.</b>			α-Naphthol-3.6.8-trisulphonic acid (1.3.6.8).....	6,443	1,344
Benzole acid.....	278,896	51,701	β-Naphthol.....	1,030,268	74,238
Phthalic acid.....	63,574	15,597	β-Naphthol-monosulphonic acid (constitution unknown).....	82,852	5,066
Tetrachloro-phthalic acid.....	1,102	659	β-Naphthol-7-sulphonic acid (F salt; 2.7).....	1,096	382
Ethyl-p-toluene-sulphonic ester.....	21	19	β-Naphthol-6.8-disulphonic acid (G acid; 2.6.8).....	11,624	1,404
<b>PRIMARY AMINES AND DERIVATIVES.</b>			1.8-Dioxy-naphthalene-4-sulphonic acid.....	2,178	1,056
Aniline oil.....	1,444,772	116,638	β-Oxy-naphtholic acid.....	2,359	972
Aniline salts.....	3,083,467	222,728	β-Oxy-naphthol anilide (Naphthol AS).....	1,997	1,218
Acetanilide.....	1,060	164	<b>AMIDO-PHENOLS AND DERIVATIVES.</b>		
p-Amido-acetanilide.....	5,568	1,365	Sodium picramate.....	5,207	1,485
p-Sulphanilic acid.....	4,477	257	Oxy-nitraniline.....	200	32
Toluidine.....	108,835	14,161	o-Amido-phenol.....	625	223
o-Toluidine.....	309,595	27,361	p-Amido-phenol.....	10,631	1,684
m-Toluidine.....	174	25	p-Amido-phenol hydrochloride.....	652	189
p-Toluidine.....	24,686	4,764	Diamido-phenol.....	441	391
Xylylene.....	18,600	2,167	p-Amido-salicylic acid.....	9,188	2,996
p-Phenetidine.....	33,093	11,925	Methyl-p-amido-phenol sulphate.....	10,582	13,658
Naphthylamine.....	25,573	2,705	1.8-Amido-naphthol-3.6-disulphonic acid (H acid; 1.8.3.6).....	96,296	22,168
α-Naphthylamine.....	112,226	10,620	2.5-Amido-naphthol-7-sulphonic acid.....	1,153	445
Naphthylamine-sulphonic acid (constitution unknown).....	500	161	<b>ALDEHYDES AND QUINONES.</b>		
α-Naphthylamine-sulphonic acid (1. acid; 1.5).....	2,832	497	Benzaldehyde.....	12,950	2,757
α-Naphthylamine-sulphonic acid (Cleve's acid; 1.6 or 1.7).....	5,493	711	Oil of bitter almonds (benzaldehyde).....	7,525	21,954
α-Naphthylamine-disulphonic acid (Freund; 1.3.6).....	5,246	604	Anthraquinone.....	25,193	4,676
β-Naphthylamine.....	5,073	997	<b>DEVELOPERS, REDUCERS, AND INDICATORS.</b>		
β-Naphthylamine-α-sulphonic acid (α or Badische acid).....	23,265	7,579	Fast Blue Developer AD (amido-diphenylamine).....	100	39
β-Naphthylamine-β-sulphonic acid (β or Brönner's acid).....	2,316	495	Oxamine Developer H.....	11,096	2,119
β-Naphthylamine-disulphonic acid (α or R acid; amido-R-salt; 2.3.6).....	46,267	4,495	Orange Developer R.....	701	376
β-Naphthylamine-disulphonic acid (γ or G acid; amido-G-salt; 2.6.8).....	3,603	230	Developer Z (phenyl-methyl-pyrazolone).....	1,397	377
<b>SECONDARY AMINES AND DERIVATIVES.</b>			Phenol-phtalein.....	14,076	14,090
Dimethyl-aniline.....	48,642	7,045	Total.....	10,165,896	1,082,775
Diphenylamine.....	55,556	9,042			
Ethyl-α-naphthylamine.....	1,102	338			
Ethyl-β-naphthylamine.....	375	190			
Phenyl-α-naphthylamine-8-sulphonic acid.....	9,139	2,860			
p-Tolyl-α-naphthylamine-8-sulphonic acid.....	1,097	568			
<b>DIAMINES AND DERIVATIVES.</b>					
Phenylene-diamine.....	37,907	7,704			
p-Phenylene-diamine.....	11,088	3,414			

## SUMMARY OF IMPORTS OF COAL-TAR PRODUCTS, 1913-14.

The coal-tar crudes and intermediates listed above, with the exception of aniline oil and salts, several acids, such as carboic acid and salicylic acid, alizarin and colors derived from alizarin, anthracene and carbazole, indigo and its derivatives, and a few other compounds, such as antipyrine, aspirine, saccharin, and phenolphthalein, are included in the following summarized statement of the imports for consumption into the United States of coal-tar products, for the fiscal year ending June 30, 1914, published by the Bureau of Foreign and Domestic Commerce.

(Imports designated by an asterisk (\*) are for the period July 1 to October 3, 1913. Those designated by a dagger (†) are for the remainder of the fiscal year.

Coal-tar products.	Rate of duty.	Value.
Anthracene and anthracene oil.....	Free.....	\$32,175.00
Colors or dyes, n. s. p. f.....	30 per cent.....	7,537,869.55
Do. (for use of the United States).....	Free.....	54.00
Dead or creosote oil (59,271,677 gallons).....	Free.....	3,822,919.00
All other, not medicinal and not colors or dyes, known as benzol, toluol, naphthalin, xylol, phenol, cresol, toluidine, xylidin, cumidin, binitrotoluid, binitrobenzol, benzidin, tolidin, dianisidin, naphthol, naphthylamin, diphenylamin, benzaldehyde, benzylchloride, resorcin, nitrobenzol, and nitrotoluid; naphthylaminsulfoacids, naphtholsulfoacids, and amidonaphtholsulfoacids and their sodium or potassium salts; amidosalicylic acid, binitrochlorbenzol, diamidostilbensulfoacid, metanilic acid, paranitranilin, and dimethylanilin.....	Free*.....	238,799.00
Distillates, n. s. p. f., not medicinal and not colors or dyes, benzol, naphthol, resorcin, toluol, xylol.....	5 per cent†.....	138,636.00
Not medicinal and not colors or dyes, known as toluidine, xylidin, cumidin, binitrotoluid, binitrobenzol, benzidin, tolidin, dianisidin, naphthylamin, diphenylamin, benzaldehyde, benzyl chloride, nitro-benzol, and nitrotoluid; naphthylaminsulfoacids, naphtholsulfoacids, and amidonaphtholsulfoacids and their sodium or potassium salts; amidosalicylic acid, binitrochlorbenzol, diamidostilbensulfoacid, metanilic acid, paranitranilin, and dimethylanilin.....	10 per cent†.....	398,906.00
Do. (for use of the United States).....	Free.....	40,741.00
Naphthalene, phenol, and cresol.....	Free†.....	195,713.00
All preparations of, not colors or dyes, and not medicinal, n. s. p. f.....	20 per cent*.....	162,864.00
All other products or preparations of, not colors or dyes, n. s. p. f.....	15 per cent†.....	496,548.13
Do. (for use of the United States).....	Free.....	18,692.00
Total coal-tar products.....	(Free..... (Dutiable.....	4,398,483.00 8,734,913.68

## IMPORTS OF INTERMEDIATES FROM GERMANY.

The official records of exports of intermediates from the German Empire to the United States show that the following quantities were shipped during the calendar year 1913:

	Short tons.
Aniline oil and salts.....	2,640
Naphthol and naphthylamine.....	660
Anthraquinone, nitrobenzene, phthalic acid, resorcin, toluidine, etc.....	1,067
Benzoic acid, salicylic acid, and their sodium salts.....	297
Total.....	4,664

## THE MARKS OF COAL-TAR COLORS.

The great diversity of marks employed by the different manufacturers of artificial dyes is a source of confusion and bewilderment to many, especially to those in the United States now taking an active interest in the evolution of a domestic coal-tar chemical industry and but slightly familiar with the commercial features of this most complicated of all the varied branches of technology. As the subject has never been treated to any extent in the literature devoted to this industry, it seems desirable to furnish some information of a general character as prefatory to the main portion of this work.

Several of the managers and chemists of the leading firms in New York City, devoted to the sale in this country of the dyes enumerated

further on, have kindly responded to inquiries in this connection. The following excerpts from their letters furnish a fairly good portrayal of the few conventional features, and the general lack of uniformity characterizing the use of marks for coal-tar colors:

The customary designation of dyestuffs as practiced by the manufacturers, their representatives, and the free-lances in the dyestuff business, does not appear to be governed by any set formula. In the early days of the artificial-dyestuff industry, when dyes were few, the manufacturers designated distinct differences in shade by the letters B, R, and G, signifying blue, red, and yellow (gelb). Our French confrères used the corresponding B, R, J (jaune), and V (vert), which became familiar to dyers and dyestuff users. As dyes multiplied, differences in shade became more numerous and it became necessary to alter or to augment, as the case might be, the distinguishing marks. Consequently the marks 2 B, or 2 R, or 2 G, etc., became common and continue to this day.

No uniformity, however, exists between the corresponding marks of different concerns. For example, Chicago Blue 6 B, the lightest and brightest of the substantive blues, is designated in the schedule of another firm as 7 B, while among the products of still another firm it is indicated as FF.

Such marks serve to distinguish in a great measure the brands of different houses. One skilled in the art of buying and selling dyestuffs can, without great difficulty, distinguish a competitor's types among a variety of designations.

As far back as 1888 I went into this matter of type designations, discussed it with prominent dye agents, and was supplied by them at the time with comprehensive lists of their dyes and the meaning of their distinguishing letters. These demonstrated conclusively that each firm selling dyes was a law unto itself, so far as the commercial designation of its products was concerned.

Many individuals in and out of the textile industry and dabblers in tinctorial chemistry have entertained the idea that there was a key to a prescribed code of type designations which, in the hands of one possessing it, would unlock the numerous combinations of dyes required by individual customers, but this is not so.

We have, for example, a familiar instance of one of the smaller dyestuff firms, which designates its dye mixtures by numbers preceded by letters. These letters indicate the mixture books, Volume A, Volume B, Volume C, etc., and the number is that of the mixture. In order to duplicate the mixture, as in the case of a physician's prescription, one simply goes to the volume indicated by the letter and picks out the corresponding number. For all time that number holds good for one particular customer. No real trade secret is divulged by communicating this bit of information.

The letter X does not necessarily mean "extra," whatever "extra" is. In the codes of some firms probably it does mean "extra," presumably higher strength or greater brilliancy or solubility. In other cases it may designate the region where certain dyes are sold. NY, for example, indicates certain brands of colors prepared especially for the American market (New York).

The whole subject of dye designations is so complex that it becomes a hopeless problem to untangle. General references to it in literature are scarce, for the reason that there is nothing definite to say upon the subject. It is much like patent medicines; the medical trade has not formulated a code to designate such remedial agents.

Some dyestuffs are differentiated from others by appended letters to indicate their source, or the materials of which they are prepared. For instance, one of the well known commercial types of Methylene Blue—specifically Methylene Blue SZ—of no particular merit as to shade, possesses properties peculiar to itself on account of having been prepared free from zinc (*sans zinc*).

From the foregoing it is easily realized that the matter of commercial designations of dyes is very complex. While there are standards; i. e., established types of individual dyes, such as those enumerated in the Schultz tables, from which millions of combinations are possible, every dyestuff firm has thousands and thousands of these combinations upon their books. Each is necessarily designated by some intelligible and comprehensive system in order to guard against errors and mistakes in compounding when called for.

Many well-known types of "straight" dyes as produced by the manufacturer are, *per se*, of little value when used alone. Their value is brought out when used in combination with other dyes, and this is the strong point of many valuable mixtures that under no circumstance can be replaced by "straight" dyes. While we prefer to use straight or unmixed colors, we are frequently compelled to make use of mixtures, the value of which for dyeing purposes far outweighs the usefulness of the individual components when used separately. Such mixtures, of necessity, must be designated by different letters or numbers, to prevent confusion. A common instance of this is the very extensive series of combination shades, of great value, produced with the fast

reds and azo scarlets, which may or may not be modified in tone by the judicious admixture of acid violets.

L. J. M.

There is no uniform practice and not much of a system in the marks which are used to distinguish the different brands of dyestuffs. This fact may seem rather strange, but it may be readily understood if one realizes that all dyestuff concerns have manufacturing and selling ends of the business—two loosely connected departments. The dyestuff is sent from the manufacturing department to the dyehouse, which is connected with the selling department. Both the dyehouse and the selling department are kept in ignorance regarding the chemical nature of any new product which is brought out. The same has, therefore, to be classified according to its shade and its dyeing properties. The result is that in many cases the dyer identifies a color with a group of others having similar dyeing properties but which, in fact, are chemically entirely different. The leading principle in naming the colors is less one of general classification than to furnish the salesman of a special factory with some hint as to the dyeing properties of any given color.

In most cases it is understood, for instance, that the letter B stands for "bluish." Hence, 2 B, which is equivalent to BB, denotes a still bluer shade. G means "greenish" or "yellowish"; R, "reddish"; V, "violet." Apart from these few cases of uniform practice the marks are open to all kinds of explanation. The mark L, for instance, may mean "soluble," or "fast to light," or even may stand for Ludwigshaven, which means that the color in question is identical with a well-known product of the Badische Co. at Ludwigshaven. In the same way C may stand for "Cassella" (Leopold Cassella & Co., Frankfurt); H for "Hoechst" (Farbwerke vorm. Meister Lucius & Brüning, Hoechst a. M.); E for "Elberfeld" (Farbenfabriken vorm. Friedr. Bayer & Co., Leverkusen, formerly at Elberfeld); and B or A for "Berlin" (Actien-Gesellschaft für Anilin-Fabrikation, Berlin). All refer to types against which the competitive products have been standardized.

The word "extra" indicates either a special shade or a special concentration. It is a rule with us that our "extra" marks are more concentrated than the single brands, which otherwise bear the same name and mark. The letter X is used by other firms in the same way as our "extra," for higher concentrations, without, however, giving any definite information regarding the proportionate strength.

Many suggestions have been made in order to do away with this rather confusing habit of classification, but so far without success. The reason is that the selling staff on the one hand, and the millman on the other hand, are not expected to possess much chemical or coloristic knowledge. Such knowledge only would enable them to benefit from a more complicated and scientific system.

A. M.

It is a fairly well-established practice among dye manufacturers to use certain marks and letters in connection with the name of a color. All dyestuffs may be said to vary in shade from red to yellow or from blue to yellow, and this variation from the standard type is designated by the letters B, G, R, etc.

Take, for instance, Methyl Violet, which varies in shade from 3 R to 6 B. The 3 R indicates a reddish shade nearly approaching Magenta, and 6 B indicates a bluish shade nearly approaching a product like Victoria Blue B. It follows from this that 3 R means a tint redder than 2 R, 3 B means a tint bluer than 2 B, and 6 B denotes a still bluer shade than 3 B.

The letter G is generally the abbreviation for the German word "Gelb," which means yellow. The French word for yellow is "jaune." Consequently, French, Belgian, and sometimes Swiss firms use the letter J where Germans use G. English and Americans employ for the same purpose the letter Y. 2 G means the same thing as if the letter G is repeated twice, and 3 G means the same as if it were repeated three times.

As to the use of the letter X and the word "extra," these two designations are by no means alike. The word "extra" is ordinarily used to indicate a quality superior to the regular type. This is sometimes shortened simply to the letter X. More generally X indicates that the product in question is reduced 10 per cent below the standard type. XX in that case would mean that it is reduced 20 per cent below the standard type.

The mark W indicates that a dye is employed preferably for "wool," and HW refers to "half wool" or union fabrics.

The mark S indicates frequently a bisulphite compound, as in the case of Alizarin Blue S, SR, and SW. Sometimes it denotes a sulphonic acid, as when used with Alizarin Red S, SA, and WS, or Fuchsine S, SS, SN, and ST.

E. C. K.

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The extensive series of manuals, issued by the leading firms engaged in the manufacture of coal-tar colors, contain very detailed directions regarding the application of the various dyes to the different fibers, paper, wood, leather, etc. Valuable bibliographies of works dealing with the art of dyeing are found in Sadtler, "Industrial Organic Chemistry" (4th ed., p. 557), in Thorp, "Outlines of Industrial Chemistry" (3d ed., p. 552), and in J. Merritt Matthews' treatise on "The Textile Fibres" (2d ed.). Some of the more important of these works are included in the list above.

A full bibliography of the literature concerning each coal-tar dye of known composition is given under the individual serial numbers in Schultz's "Farbstofftabellen" (1914), the classification of which has been adopted in the main part of this work. In the index of the "Farbstofftabellen" references are found to the literature regarding dyes of unknown composition.

The following periodicals, devoted to color chemistry, contain a vast amount of valuable information and elaborate collections of samples illustrating the application of new dyes as they appear:

Journal of the Society of Dyers and Colourists, Bradford, England.

Textile Colorist, Philadelphia, Pa.

Revue Générale des Matières Colorantes, Paris.

Färber-Zeitung. Dr. Adolf Lehne, Berlin.

Zeitschrift für Farben- und Textilchemie. Dr. A. Buntrock, Braunschweig.

Zeitschrift für Farben-Industrie, Berlin.

Deutscher Färberkalender, Wittenberg. (An annual.)

The Year Book for Colorists and Dyers, Herman A. Metz, Vol. XV, 1912 (latest issue). New York.

The patent literature is systematically arranged in Schultz's "Farbstofftabellen," and in Heumann's extensive work, "Die Anilinfarben." In Friedländer's large compendium, "Fortschritte der Teerfarbenindustrie" (11 vols.), and in that of Winther, which covers the entire field of organic chemistry, German patents alone are considered.

The various journals of pure and of applied chemistry contain an enormous number of studies bearing upon the technical or more purely scientific questions connected with the preparation, properties, reactions, manufacture, and industrial uses of the various coal-tar colors. The indices of such publications as the "Journal of the Society of Chemical Industry" (London), the "Zeitschrift für Angewandte Chemie" (Leipzig), the "Chemisches Centralblatt" (Berlin), the "Bulletin de la Société Chimique de France" (Paris), the abstracts of the "Journal of the Chemical Society" (London), "Chemical Abstracts," published by the American Chemical Society (Easton, Pa.), and Wagner's "Jahresbericht über die Leistungen der chemischen Technologie" (Leipzig), serve as guides to this literature. The more purely scientific data are systematically classified in the successive issues of Beilstein's "Organische Chemie" (Berlin).

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## ARTIFICIAL DYESTUFFS IMPORTED INTO THE UNITED STATES, 1913-14

### CLASSIFICATION.

These dyestuffs are classified according to the system adopted by Prof. G. Schultz, in his "Farbstofftabellen" (5th ed., 1914, Berlin). This work contains full references to the technical and patent literature regarding each color of known composition. It furnishes also details on the physical and chemical properties of each color, such as spectrum, solubility in different solvents, reactions with various reagents, etc., and especially on the tinctorial properties and methods of utilization in dyeing textile and other materials. It is the *vade mecum* of all engaged in manufacturing or in using artificial colors.

In most cases a coloring matter of known composition is manufactured and imported under a variety of trade designations, although in frequent instances the same name and often the same marks are employed by more than one of the firms producing some of the older, patent-free dyes.

Following each serial number of the Schultz systematic arrangement comes first the commercial name under which the dyestuff in question is most widely known or purchased in this country. It is accompanied by the date of discovery, by the total weight, and, in most cases, by the invoice value of the importations under this head for the fiscal year ending June 30, 1914. Then follow the chemical name and formula of the compound in question, or brief indications regarding the method of preparation. The various names and marks under which the dyestuff is imported are next given, each mark or brand being accompanied by the symbol representing the manufacturing firm. Frequent reference is made to sources of fuller information regarding the character and use of colors of recent introduction.

In numerous cases subdivisions follow a main heading and are designated by the same serial number with appended letters; for example, 81, 81a, 81b. The dyestuffs enumerated under these secondary headings are, as a rule, closely allied chemically with the colors given under the main heading. In some instances the specific names or marks assigned to them represent purely mechanical differences in the method of preparation, facilitating use under varying conditions. In other instances the chemical reactions involved are modified in different ways, so as to insure more or less pronounced variations in shade.

Quite a number of the dyestuffs of known composition, currently manufactured and used in Europe or other parts of the world, and enumerated in the systematic classification of Prof. Schultz, are not regularly imported into this country. For the sake of completeness, and as a matter of convenience to dealers in colors, these dyestuffs appear in their serial order. They are accompanied by the date of discovery, the symbol denoting the leading manufacturer, and the chemical name. A zero in the column for quantities denotes the absence of imports.

The number of designations of imported artificial colors catalogued below under the 923 serial headings of Prof. Schultz's "Tables," the composition or preparation of which are more or less known, is 3,580.

In addition, the list contains 2,094 designations of dyestuffs, regarding the chemical nature of which but little has been made public other than the facts that in some cases they are azo colors; in other cases, sulphur colors. The azo colors falling in this category are enumerated at page 110; the sulphur blacks at page 170; the remaining sulphur colors at page 175; and the dyes not belonging to either of the two classes, at page 196.

### SYMBOLS DENOTING MANUFACTURER.

Under each serial or secondary heading the names of dyes are arranged in a fixed order, according to the following classification of manufacturing companies. The symbol used for each company precedes its name and location:

#### 1. THE SIX LEADING GERMAN COMPANIES.

- A.....Actien-Gesellschaft für Anilin-Fabrikation, Berlin. Founded, 1873. Branches in France and Russia.
- B.....Badische Anilin- und Soda-Fabrik, Ludwigshafen on the Rhine. Founded, 1865. Branches in France and Russia.
- By.....Farbenfabriken vorm. Friedr. Bayer & Co., Leverkusen on the Rhine. Founded, 1862. Branches in France, Russia, and the United States (Rensselaer, N. Y.).
- C.....Leopold Cassella & Co., Frankfort on the Main. Founded, 1870. Branches in France and Russia.
- K.....Kalle & Co., A.-G., Biebrich on the Rhine. Founded, 1870. Branch in Russia.
- M.....Farbwerke vorm. Meister Lucius & Brüning, Höchst on the Main. Founded, 1862. Branches in France and Russia.

#### 2. THE SEVEN SMALLER GERMAN COMPANIES.

- BK.....Leipziger Anilinfabrik Beyer & Kegel, Fürstenberg near Leipzig. Founded, 1882.
- CG.....Chemikalienwerk Griesheim G. m. b. H., Griesheim on the Main. Founded, 1881.
- CJ.....Carl Jäger G. m. b. H., Anilinfarbenfabrik, Düsseldorf. Founded, 1823.
- GrE.....Chemische Fabrik Griesheim-Elektron, Offenbach on the Main. Founded, 1842.
- L.....Farbwerk Mühlheim vorm. A. Leonhardt & Co., Mühlheim on the Main. Founded, 1879. Branch in France.
- WM.....Chemische Fabriken vorm. Weiler-ter-Meer, Uerdingen on the Rhine. Founded, 1877.
- WD.....Wülfig, Dahl & Co., A.-G., Barmen. Founded, 1842.

#### 3. DUTCH, BELGIAN, AND FRENCH COMPANIES.

- FA.....Farbwerk Ammersfoort, Ammersfoort, Netherlands. Founded, 1888.
- NF.....Niederländische Farben- und Chemikalienfabrik Delft, Delft, Netherlands. Founded, 1897. Branch in Russia.
- AW.....A. Wiescher & Co., Suc., Haeren, Belgium. Founded, 1836. (For the sake of convenience, products exported to the United States by Lazard Godchaux, of Brussels, are also designated by the symbol AW. These products are compounded largely from the dyes made by A. Wiescher & Co., or by German color manufacturers.)
- P.....Société Anonyme des Matières colorantes et produits chimiques St. Denis (formerly A. Poirrier), St. Denis, near Paris, France. Founded, 1830.

#### 4. SWISS COMPANIES, ALL AT BASEL.

- DH.....Farbwerke vorm. L. Durand, Huguenin & Co. Founded, 1871. Branches in Germany and France.
- G.....Anilinfarben- und Extract-Fabriken vorm. Joh. Rud. Geigy. Founded, 1764. Branches in France, Germany, and Russia.
- I.....Gesellschaft für chemische Industrie. Founded, 1885. Branch in France.
- S.....Chemische Fabrik vorm. Sandoz & Co. Founded, 1887.

## 5. ENGLISH COMPANIES.

- ClCo....The Clayton Aniline Co. (Ltd.), Clayton, near Manchester. Founded, 1876.  
 CR.....Claus & Co. (formerly Claus & Rée), Clayton, near Manchester. Founded, 1890.  
 CV.....Colne Vale Chemical Co., Milnsbridge, near Huddersfield.  
 H.....Read Holliday & Sons (Ltd.), Huddersfield. Founded, 1830. (Purchased, by British Dyes (Ltd.) in 1915.)  
 Lev.....Levinstein (Ltd.), Crumpsall Vale, near Manchester. Founded, 1864.

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Sch.....Schoellkopf Aniline & Chemical Works (Inc.), Buffalo, N. Y. Founded, 1879. (Mention is made of this American company in connection with certain dyes of American invention listed in Schultz's tables but naturally not imported.)

Q.....Importations of unknown source, through dealers in colors.

## ABBREVIATIONS.

Apart from the symbols denoting manufacturing companies, given above, the following abbreviations are employed in the list of colors:

conc.....concentrated.

Gr.....A. G. Green, "A Systematic Survey of the Organic Colouring Matters," 2d ed. London, 1904.

Kal....."Deutscher Färberkalender," published annually at Wittenberg, Germany.

R.....E. Ristenpart, "Chemische Technologie der organischen Farbstoffe." Leipzig, 1911.

red.....reduced.

S.....Index of G. Schultz's "Farbstofftabellen," Berlin, 1914, containing references to periodical literature and various publications regarding numerous dyestuffs of unknown composition.

S. H. IV ...K. Heumann, "Die Anilinfarben," Part IV, by Gustav Schultz (The Azo Colors). Brunswick, Germany, 1906.

S. J.....Gustav Schultz and Paul Julius, "Tabellarische Uebersicht der im Handel befindlichen künstlichen organischen Farbstoffe." Berlin, editions 1 to 4. The fourth edition appeared in 1902. Predecessors of Schultz's, "Farbstofftabellen."

V. M.....Various marks.

## MARKS.

The various marks accompanying the names of dyestuffs have been considered already in a general manner. It is necessary here to call attention to the fact that in a few instances the marks employed in invoices of imported colors, and reproduced in connection with the same colors as enumerated in the following list, are not those used currently either in the country of origin, or in American trade and consumption, or in Schultz's "Tables." This is more notably the case with colors manufactured by Leopold Cassella & Co., of Frankfort. There are some few examples among the shipments of other firms.

In such instances, while reproducing the marks and numbers of the invoiced wares, it has seemed necessary to append, in each case, a list of the current marks for varying modifications of a given color, which are used by foreign dealers and American dyers. When the same color designation appears under several invoice marks, a list of such current marks is, therefore, added in parenthesis to the first-mentioned under any heading. Illustrations of this practice are to be found in connection with Nos. 266, 546, and 736a.

## ARTIFICIAL DYESTUFFS IMPORTED DURING THE FISCAL YEAR ENDING JUNE 30, 1914.

## I. NITROSO COLORING MATTERS.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
1	SOLID GREEN O.....1875 Dinitrosoresorcin.	M	0	
2	FAST PRINTING GREEN.....1875 $\alpha$ -nitroso- $\beta$ -naphthol.	K	0	
3	DIOXINE.....1889 1-nitroso-2,7-dioxynaphthalene.	L	0	
4	NAPHTHOL GREEN.....1883 Ferrous sodium salt of nitroso- $\beta$ -naphthol- $\beta$ -monosulphonic acid. $\text{C}_{10}\text{H}_7\left\{\begin{array}{l} \text{[1]—NO—Fe—ON—[1]} \\ \text{2=O} \qquad \qquad \text{O=2} \\ \text{[6]SO}_2\text{Na} \qquad \text{NaO}_2\text{S[6]} \end{array}\right\}\text{C}_{10}\text{H}_7$ Green PLX..... Naphthol Green B..... Naphthol Green B.....	B C By	19,146	\$2,902

## II. NITRO COLORING MATTERS.

5	PICRIC ACID.....1842 Symmetrical trinitrophenol. (Used but slightly at present for dyeing purposes; largely employed as a high explosive.)		0	
6	MARTIUS YELLOW.....1856 Ammonium, sodium, or calcium salt of 2,4-dinitro-1-naphthol. Free acid: $\text{C}_6\text{H}_3\left\{\begin{array}{l} \text{C(OH) : C(NO}_2\text{)} \\ \text{C(NO}_2\text{) : CH} \end{array}\right\}$ Aniline Yellow..... Martius Yellow 6749 rect..... Martius Yellow 741..... Aniline Yellow.....	B BK G Q	3,295	\$1,896
7	NAPHTHOL YELLOW.....1879 Sodium (or potassium) salt of 2,4-dinitro-1-naphthol-7-sulphonic acid. $\text{C}_{10}\text{H}_7(\text{SO}_2\text{Na})\left\{\begin{array}{l} \text{C(ONa) : C(NO}_2\text{)} \\ \text{C(NO}_2\text{) : CH} \end{array}\right\}$ [ONa : NO <sub>2</sub> : NO <sub>2</sub> : SO <sub>2</sub> Na=1 : 2 : 4 : 7] Naphthol Yellow S..... Naphthol Yellow S (for lake)..... Naphthol Yellow SE..... Naphthol Yellow SE..... Naphthol Yellow S conc. (S.)..... Naphthol Yellow SLC..... Naphthol Yellow SLC 10 per cent red..... Naphthol Yellow SLC 15 per cent red..... Naphthol Yellow SLZ conc..... Naphthol Yellow.....	B B B By By M M M M I Q	250,409	24,792
7b	IMPERIAL YELLOW R (Cl. S. "Aurantia," p. 368, and Green, No. 6) (used in photography).....	By	613	
8	PIGMENT CHLORINE.....1904 Condensation product of nitro-toluidine and formaldehyde.	M	0	

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
9	DIRECT YELLOW.....1883 Sodium salt of azoxy-azo-distilbene-tetrasulphonic acid. Chief constituent: $\text{CH}_3\text{C}_6\text{H}_4\left\{\begin{array}{c} [2] \text{SO}_2\text{Na} \quad \text{NaO}_2\text{S} [2] \\ [4] \text{N} = \text{N} [4] \end{array}\right\} \text{C}_6\text{H}_4\text{HC}$ $\left\{\begin{array}{c} [1] \\ [1] \end{array}\right\}$ $\text{CH}_3\text{C}_6\text{H}_4\left\{\begin{array}{c} [4] \text{N} = \text{N} [4] \\ [2] \text{SO}_2\text{Na} \quad \text{NaO}_2\text{S} [2] \end{array}\right\} \text{C}_6\text{H}_4\text{HC}$ Direct Yellow R extra..... Direct Yellow R extra conc. 27969..... Curcumine S000..... Renol Yellow 3 R..... Sun Yellow 3 GC..... Sun Yellow G conc..... Sun Yellow RR..... Direct Yellow 242.....	By By L tM G S S ClCo	71,399	\$11,295
9a	NAPHTHAMINE YELLOW (V. M.)..... 1-naphthamine Yellow GN (S; S. H. IV, 1532; R. 59.) (Current mar' s, BN, G, 2 G, 3 G, GN, GR, GX, NC.)..... Naphthamine Yellow R..... Naphthamine Yellow X..... Naphthamine Yellow 188..... Naphthamine Yellow 3504..... Naphthamine Yellow 3505..... Naphthamine Yellow 3511..... Naphthamine Yellow 3515.....	K K K K K K K K	42,180	6,748
9b	DIRECT YELLOW (V. M.)..... Direct Yellow BK..... Direct Yellow G..... Direct Yellow GBE..... Direct Yellow GR..... Direct Yellow 2 G..... Direct Yellow PI..... Direct Yellow extra (greenish)..... Direct Yellow 188..... Direct Yellow 660..... Direct Yellow 3509..... Direct Yellow 3514.....	K K K K K K K K K K K K	79,055	16,784
9c	DIRECT YELLOW V conc.....	AW	1,810	
9d	DIRECT YELLOW MC.....	G	441	
9e	DIRECT YELLOW C.....	S	2,635	
9f	DIRECT YELLOW 6 G.....	S	1,938	
9g	DIRECT YELLOW B (S. J., 2d ed., 183).....	A	29,123	
9h	DIRECT YELLOW (V. M.)..... Direct Yellow CA..... Direct Yellow PC..... Direct Yellow Z conc.....	H Q Q	4,107	1,002
10	STILBENE YELLOW.....1886 Sodium salt of dimnitro-azo-distilbene-disulphonic acid. (Chief constituent.) Stilbene Yellow GX..... Stilbene Yellow 2 GP conc..... Stilbene Yellow 3 GPX..... Mikado Golden Yellow 6 G..... Mikado Golden Yellow 8 G..... Stilbene Yellow 3 G..... Stilbene Yellow 3 G.....	B B B L L CR ClCo	50,477	7,464
10a	STILBENE YELLOW RX.....	B	34,588	
10b	STILBENE YELLOW 5912 conc.....	B	730	



### III. STILBENE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
11	<b>CHLORAMINE ORANGE</b> ..... 1888 Sodium salt of disazo-distil:ene-tetrasulphonic acid.  Chief constituent: $\begin{array}{c} \text{SO}_2\text{Na} \qquad \qquad \text{SO}_2\text{Na} \\   \qquad \qquad \qquad   \\ \text{CH}-\text{C}_6\text{H}_4-\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{CH} \\   \qquad \qquad \qquad   \\ \text{CH}-\text{C}_6\text{H}_4-\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{CH} \\   \qquad \qquad \qquad   \\ \text{SO}_2\text{Na} \qquad \qquad \text{SO}_2\text{Na} \end{array}$  Mikado Orange 4 RC ..... Mikado Orange 4 RO ..... Chloramine Orange G ..... Mikado Orange G ..... Mikado Orange 4 RO ..... Mikado Brown 2 B ..... Mikado Brown M .....	A A By L L L L L	24,688	\$5,914
11a	<b>DIRECT ORANGE R extra (S.)</b> .....	K	220	
11b	<b>DIRECT ORANGE H</b> .....	G	1,102	
12	<b>DIPHENYL CITRONINE G</b> ..... 1897 Obtained by the condensation of dinitro-stil:ene-disulphonic acid with caustic soda and aniline.	G	0	
13	<b>DIPHENYL ORANGE RR</b> ..... 1890 Obtained by the condensation of p-nitro-toluene-sulphonic acid and p-phenylene-diamine.  Chief constituent: $\begin{array}{c} \text{SO}_2\text{Na} \\   \\ \text{CH}-\text{C}_6\text{H}_4-\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{NH}_2 \\   \\ \text{CH}-\text{C}_6\text{H}_4-\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{NH}_2 \\   \\ \text{SO}_2\text{Na} \end{array}$	G	2,447	
13a	<b>DIPHENYL ORANGE-GO superfine</b> .....	G	13,646	
14	<b>DIPHENYL CHRYSOINE</b> ..... 1899 Ethylation of the product of the condensation of p-nitro-toluene-sulphonic acid (2 mols.) with p-amidophenol (1 mol.) in presence of aqueous caustic soda.  Probable composition: $\begin{array}{c} \text{SO}_2\text{Na} \\   \\ \text{CH}-\text{C}_6\text{H}_4-\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{O.C}_2\text{H}_5 \\   \\ \text{CH}-\text{C}_6\text{H}_4-\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{O.C}_2\text{H}_5 \\   \\ \text{SO}_2\text{Na} \end{array}$  Diphenyl Chrysoine GC ..... Diphenyl Chrysoine GOO ..... Diphenyl Chrysoine 3 GN .....	G G G	9,898	3,071
15	<b>CHICAGO ORANGE G</b> ..... 1892 Condensation of p-nitro-toluene-o-sulphonic acid with benzidine.	G	0	
16	<b>CURCUPHENINE</b> ..... 1896 Sodium sulphate of the dehydrothio-toluidide of azoxy-stil:ene aldehyde.	ClCo	0	
17	<b>CHLOROPHENINE</b> ..... 1896 Sodium sulphate of the dehydrothio-toluidide of azostil-bene aldehyde.	ClCo	0	
18	<b>DIPHENYL FAST YELLOW G</b> ..... 1897 Condensation of dinitro-dibenzyl-disulphonic acid with Primuline or dehydrothio-toluidine-sulphonic acid in presence of caustic soda.	G	573	
18a	<b>DIPHENYL CHLORINE YELLOW (V. M.)</b> ..... Diphenyl Chlorine Yellow 229 ..... Diphenyl Chlorine Yellow FF superfine (Kaf. 1913) ..... Diphenyl Chlorine Yellow G .....	G G G G	9,656	2,988

## IV. PYRAZOLONE COLORING MATTERS.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
19	<b>FAST LIGHT YELLOW</b> .....1892 Obtained by the action of aniline on 1-p-sulphophenyl-3-methyl-5-pyrazolone.  Sodium salt: $\begin{array}{c} \text{CH}-\text{N}=\text{N}-\text{C}_6\text{H}_5 \\   \\ \text{CH}_3-\text{C}-\text{CO} \\   \\ \text{N}-\text{N}-\text{C}_6\text{H}_4-\text{SO}_2\text{Na} \end{array}$  Fast Light Yellow G..... Fast Light Yellow 2 G..... Fast Light Yellow 2 G 27432..... Fast Light Yellow GGN..... Fast Light Yellow 3 G..... Flavazine L.....	By By By By By M	33,514	\$10,272
19a	<b>FAST LIGHT YELLOW RG</b> (S.; Kal. 1909).....1907	By	5,394	
20	<b>FLAVAZINE S</b> .....1899 Obtained by the action of aniline on 1-p-sulphophenyl-5-pyrazolone-3-carboxylic acid.  Sodium salt: $\begin{array}{c} \text{CH}-\text{N}=\text{N}-\text{C}_6\text{H}_5 \\   \\ \text{NaO}_2\text{C}-\text{C}-\text{CO} \\   \\ \text{N}-\text{N}-\text{C}_6\text{H}_4-\text{SO}_2\text{Na} \end{array}$	M	19,000	
20a	<b>FLAVAZINE (V. M.)</b> ..... Flavazine F 3 GL (S.; Kal. 1912, 1914)..... Flavazine T..... Flavazine T 15 per cent red.....	M M M	62,375	10,700
21	<b>PIGMENT CHROME YELLOW L</b> .....1904 Action of toluidine on methyl-phenyl-pyrazolone.	M	0	
22	<b>XYLENE YELLOW</b> .....1908 Action of diazosulphonic acids on 1-o-m-dichloro-p-sulphophenyl-3-methyl-5-pyrazolone.  Sulphanilic derivative: $\begin{array}{c} \text{CH}-\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{SO}_2\text{Na} \\   \\ \text{CH}_3-\text{C}-\text{CO} \\   \\ \text{N}-\text{N}-[\text{I}]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} [3]\text{Cl} \\ [4]\text{SO}_2\text{Na} \\ [6]\text{Cl} \end{array} \right. \end{array}$  Xylene Yellow 3 G..... Xylene Yellow 3 G..... Xylene Yellow 3 G conc..... Xylene Light Yellow 2 G..... Xylene Light Yellow R..... Xylene Light Yellow 2 G (Kal. 1910)..... Xylene Light Yellow 2 G conc..... Xylene Light Yellow 2 G conc. 7 : 10.....	K S S K K S S S S	23,074	9,760
23	<b>TARTRAZINE</b> .....1881 Sodium salt of benzene-azo-pyrazolone-carboxy-disulphonic acid. $\text{C}_6\text{H}_4(\text{SO}_2\text{Na})-\text{N} \begin{array}{l} \text{N}-\text{C}-\text{CO}_2\text{H} \\   \\ \text{CO}-\text{CH}-\text{N}_2-\text{C}_6\text{H}_4(\text{SO}_2\text{Na}) \end{array}$  Tartrazine G..... Tartrazine X..... Tartrazine XX..... Tartrazine..... Tartrazine conc. 28063..... Tartrazine conc. 9254..... Tartrazine 9520..... Tartrazine..... Tartrazine extra strong..... Tartrazine conc. 150 per cent..... Tartrazine..... Tartrazine conc. 36260..... Tartrazine conc. pure..... Tartrazine extra conc. 5½ : 10.....	B B B By By BK BK AW AW I S S S S	265,731	53,137

## IV. PYRAZOLONE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
23a	FAST ACID YELLOW 39 F 1535 (S.; Kal. 1910)..... (Current marks, 3 G, T.L.)	C	4,696	
24	PIGMENT FAST YELLOW R.....1903 Action of o-toluidine-m-sulphonic acid on phenyl-methyl- pyrazolone.	M	0	
25	DIANIL YELLOW 3 G.....1897 Action of aceto-acetic ester on primuline-sulphonic acid.	M	0	
26	DIANIL YELLOW R.....1890 Action of primuline-sulphonic acid on 4-phenyl-3-methyl-5- pyrazolone.	M	0	
27	DIANIL YELLOW 2 R.....1900 Action of primuline-sulphonic acid on p-sulpho-phenyl- methyl-pyrazolone.	M	0	
28	PIGMENT FAST YELLOW G.....1903 Action of p-sulpho-anthranilic acid on phenyl-methyl-pyrazo- lone.	M	0	
29	ERIOCHROME RED.....1904 Action of 1-amido-2-naphthol-4-sulphonic acid on 1-phenyl-3- methyl-5-pyrazolone.		5,491	\$3,628
	$\text{C}_6\text{H}_5 \begin{Bmatrix} 1\text{N} \\ 2\text{OH} \\ 4\text{SO}_2\text{Na} \end{Bmatrix} \begin{array}{c} \text{N} \\ \text{HO}-\text{C}-\text{C}-\text{CH}_3 \\   \quad   \\ \text{N} \quad \text{N} \\   \quad   \\ \text{C}_6\text{H}_5 \end{array}$			
	Eriochrome Red B.....	G		
	Eriochrome Red AW.....	G		
30	RADIAL YELLOW G.....1909 An acid pyrazolone coloring matter.	B	0	

## V. AZO COLORING MATTERS.

A. MONOAZO COLORS.				
31	AMIDO-AZO-BENZENE.....1861 From diazo-amido-benzene and aniline hydrochloride.		0	
32	BUTTER YELLOW.....1876 Dimethyl-amido-azo-benzene.	A	0	
	$\text{C}_6\text{H}_5-\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{N}(\text{CH}_3)_2$			
32a	OIL YELLOW 7869.....	I	4,006	
32b	OIL YELLOW.....	H	57	
33	CHRYSOIDINE.....1875 Hydrochloride of benzene-azo-m-phenylene-diamine.		65,308	\$3,596
	$\text{C}_6\text{H}_5-\text{N}=\text{N}-\text{C}_6\text{H}_4(\text{NH}_2)_2\text{HCl}[1:2:4]$			
	Chrysoidine 46903.....	A		
	Chrysoidine A.....	B		
	Chrysoidine E cryst.....	B		
	Chrysoidine 28 V 1275.....	C		
	Chrysoidine.....	C		
	Chrysoidine. (Current marks, S, T.).....	K		
	Chrysoidine 1001.....	K		
	Chrysoidine Base 6506.....	K		
	Chrysoidine small cryst. extra.....	tM		
	Chrysoidine powder new, extra conc.....	tM		
	Chrysoidine 3 N powder.....	tM		
	Chrysoidine Y powder.....	tM		
	Chrysoidine 2 Y cryst.....	tM		
	Chrysoidine C 2 E.....	P		
	Chrysoidine RD pure.....	CV		
	Chrysoidine Y powder 10 per cent.....	H		

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
34	CHRYSOIDINE R..... Hydrochloride of benzene-azo-m-tolylene-diamine. $C_6H_5-N=N-C_6H_3(CH_3)(CH_3)_2HCl[1:5:2:4]$ Chrysoidine RL..... Chrysoidine RL base..... Chrysoidine RLE..... Chrysoidine AR conc., powder..... Chrysoidine R conc., powder..... Chrysoidine RE..... Chrysoidine R conc., powder.....	B B B tM tM P G	105,948	\$16,852
34a	CHRYSOIDINE T base.....	B	110	
34b	CEROTINE SCARLET G extra.....	CJ	99	
34c	COTTON ORANGE 16737.....	I	551	
34d	COTTON ORANGE.....	S	4,299	
35	SUDAN G.....1875 Dioxy-azo-benzene or benzene-azo-resorcin. $C_6H_5-N=N-C_6H_3(OH)_2[1:2:4] \text{ \& } [1:2:6]$ Sudan G..... Sudan 2 G..... Cerasine Orange G.....	A A C	798	250
36	SUDAN I.....1878 Benzene-azo- $\beta$ -naphthol. $C_6H_5-N=N-C_{10}H_7.OH[\beta]$	A	399	
36a	OIL ORANGE LG.....	I	4,005	
36b	ORANGE 227.....	Q	159	
37	CROCEINE ORANGE.....1878 Sodium salt of benzene-azo- $\beta$ -naphthol-6-sulphonic acid. $C_6H_5-N=N-C_{10}H_6(OH)(SO_3Na)[1:2:6]$ Ponceau 4 GB..... Orange GRX..... Croceine Orange G..... Croceine Orange X..... Croceine Orange G..... Brilliant Orange G..... Croceine Orange.....	A B By C K M BK	11,366	1,535
37a	ORANGE (V. M.)..... Orange D..... Orange X.....	B H	1,680	201
38	ORANGE G.....1878 Sodium salt of benzene-azo- $\beta$ -naphthol-6,8-disulphonic acid. $C_6H_5-N=N-[1]C_{10}H_4\left\{\begin{array}{l} [2] OH \\ [6] SO_3Na \\ [8] SO_3Na \end{array}\right.$ Orange G..... Orange G..... Fast Light Orange G..... Orange 67 E 2243. (Current marks, A, ENL, ENZ, G, GG, I, II, III, IV, R, RL, RRL.) Orange F 174..... Orange G 175..... Orange J 178..... Orange QQ 424..... Orange G..... Crystal Orange 2 G 95..... Crystal Orange 2 G..... Orange Crystals 2 G..... Orange Crystals..... Orange 2 G.....	A B By C C C C C M CG WD WD AW H	48,456	7,159

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
39	PONCEAU G.....1878 Sodium salt of benzene-azo-β-naphthol-3.6-disulphonic acid.	M	0	
40	CHROMOTROPE 2 R.....1890 Sodium salt of benzene-azo-1.8-dioxynaphthalene-3.6-disulphonic acid.	M	5,000	
	$\text{C}_{20}\text{H}_9 \begin{Bmatrix} [1] \text{OH} \\ [2] \text{N}=\text{N}-\text{C}_6\text{H}_5 \\ [3] \text{SO}_3\text{Na} \\ [6] \text{SO}_3\text{Na} \\ [8] \text{OH} \end{Bmatrix}$			
41	FAST ACID FUCHSINE B.....1890 Sodium salt of benzene-azo-1.8-amido-naphthol-3.6-disulphonic acid.	By	0	
42	AMIDO NAPHTHOL RED G.....1902 From aniline and acetyl-H-acid.	M	3,500	
43	TOLANE RED B, G.....1893 Sodium salt of benzene-azo-1.8-amido-naphthol-4.6-disulphonic acid.	K	0	
44	AZO ORSEILLE R.....1893 From aniline and amido-naphthol-disulphonic acid RR.	A	0	
45	BRILLIANT LAKE RED R.....1893 From aniline and β-oxy-naphthoic acid.	M	\$1,674	
46	AZOPHOR ORANGE MN.....1885 m-Diazo-nitrobenzene sulphate with aluminum sulphate.	M	0	
47	ORANGE No. 3.....1878 Sodium salt of m-nitrobenzene-azo-β-naphthol-disulphonic acid.	P	0	
48	ALIZARIN YELLOW.....1887 m-Nitrobenzene-azo-salicylic acid.		144,761	\$11,118
	$\text{C}_6\text{H}_3 \begin{Bmatrix} [3] \text{NO}_2 \\ [1] \text{N}=\text{N}[\text{C}_6\text{H}_4 \begin{Bmatrix} [4] \text{OH} \\ [3] \text{CO}_2\text{H} \end{Bmatrix}] \end{Bmatrix}$			
	Mordant Yellow GTS paste.....	B		
	Alizarin Yellow CY powder.....	By		
	Alizarin Yellow GG.....	By		
	Alizarin Yellow GG 28159.....	By		
	Alizarin Yellow DGC.....	M		
	Alizarin Yellow D 3 G.....	M		
	Alizarin Yellow DOG.....	M		
	Alizarin Yellow DOO.....	M		
	Alizarin Yellow DR.....	M		
	Alizarin Yellow GG paste.....	M		
	Alizarin Yellow GGW.....	M		
	Alizarin Yellow 5 G powder.....	M		
	Alizarin Yellow GG paste 25 per cent.....	I		
	Alizarin Yellow 5 G.....	I		
	Alizarin Yellow G.....	S		
49	PRAGUE ALIZARIN YELLOW G.....1894 m-Nitrobenzene-azo-resorcylic acid.	Kl	0	
50	AZO CARDINAL G.....1893 From p-nitraniline and ethyl-benzyl-aniline-sulphonic acid.	A	0	
51	THIAZOL YELLOW RH.....1893 Sodium salt of diazo-dehydrothio-toluidine-sulphonic-acid-p-nitranilide.	By	423	
	$\text{C}_6\text{H}_3 \begin{Bmatrix} [4] \text{CH}_3 \\ [1] \text{N}=\text{N} \end{Bmatrix} \text{C}[\text{C}_6\text{H}_4 \begin{Bmatrix} [2] \text{S} \end{Bmatrix} \begin{Bmatrix} [4] \text{SO}_3\text{Na} \\ [1] \text{N} \end{Bmatrix}]$			
	$\text{C}_6\text{H}_3 \begin{Bmatrix} [1] \text{NH} \cdot \text{N} \\ [4] \text{NO}_2 \end{Bmatrix}$			
52	ARCHIL SUBSTITUTE V.....1878 Sodium salt of p-nitrobenzene-azo-α-naphthylamine-4-sulphonic acid.	P	0	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
53	ARCHIL SUBSTITUTE 3 VN ..... 1887 Sodium salt of p-nitrobenzene-azo- $\alpha$ -naphthylamine-sulphonic acid.	P	0	
54	APOLLO RED ..... 1887 Sodium salt of p-nitrobenzene-azo- $\alpha$ -naphthylamine-disulphonic acid. $\text{C}_6\text{H}_4 \left\{ \begin{array}{l} [4]\text{NO}_2 \\ [1]\text{N}=\text{N}[2]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} [1]\text{NH}_2 \\ [4]\text{SO}_2\text{Na} \\ [6 \text{ or } 7]\text{SO}_2\text{Na} \end{array} \right. \end{array} \right.$ Apollo Red B conc. .... Apollo Red G conc. ....	G G	904	\$158
55	BRILLIANT ORSEILLE ..... 1893 Sodium salt of the azimide of p-nitrobenzene-azo-1.8-naphthylene-diamine-disulphonic acid. $\text{C}_{10}\text{H}_5 \left\{ \begin{array}{l} [3]\text{N}=\text{N} \\ [1]\text{NH}- \\ [2]\text{N}=\text{N}-\text{C}_6\text{H}_4(\text{NO}_2) \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{array} \right.$	C	401	
56	AUTOL RED (PARANITRANILINE RED) ..... 1890 p-Nitrobenzene-azo- $\beta$ -naphthol. $\text{C}_6\text{H}_4 \left\{ \begin{array}{l} [4]\text{NO}_2 \\ [1]\text{N}=\text{N}[1]\text{C}_{10}\text{H}_7[2]\text{OH} \end{array} \right.$ Autol Red BL (for paper) paste ..... Sitara Fast Red RL powder .....	B tM	49,847	5,379
57	CHROMOTROPE 2 B ..... 1890 Sodium salt of p-nitrobenzene-azo-1.8-dioxynaphthalene-3.6-disulphonic acid. $\text{C}_{10}\text{H}_5 \left\{ \begin{array}{l} [1]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \\ [7]\text{N}=\text{N}-\text{C}_6\text{H}_4(\text{NO}_2) \\ [8]\text{OH} \end{array} \right.$	M	470	
57a	CHROMOTROPE (V. M.) ..... Chromotrope 8 (S.; S. H. IV, 985) ..... Chromotrope 8 15 per cent red ..... Chromotrope DW (S. 1903) (mixtures) .....	M M M	7,500	1,962
58	MORDANT YELLOW ..... 1885 p-Nitrobenzene-azo-salicylic acid. $\text{C}_6\text{H}_4 \left\{ \begin{array}{l} [4]\text{NO}_2 \\ [1]\text{N}=\text{N}[1]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4]\text{OH} \\ [3]\text{CO}_2\text{H} \end{array} \right. \end{array} \right.$ Metachrome Orange R double powder (S. 1912) ..... Mordant Yellow 3 R ..... Mordant Yellow 3 R powder ..... Alizarin Yellow RW ..... Alizarin Yellow 3 RN ..... Milling Orange RO (Kal. 1908) ..... Terra Cotta RGN (Kal. 1914) .....	A B B M M M L G	26,570	4,112
58a	ALIZARIN YELLOW (V. M.) ..... Alizarin Yellow O paste ..... Alizarin Yellow O conc. .... Alizarin Yellow O conc. 15 per cent red ..... Alizarin Yellow O conc. 30 per cent red .....	M M M M	59,000	7,676
58b	ANTHRACENE YELLOW (V. M.) ..... Anthracene Yellow RN paste 20 per cent ..... Anthracene Yellow 3 RN powder .....	M M	515	694
58c	ORANGE (V. M.) ..... Orange 13 ..... Orange 14 ..... Orange 23981 .....	S S S	10,974	2,694

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
59	WOOL VIOLET S.....1894 Sodium salt of dinitrobenzene-azo-diethyl-m-sulphanilic acid. $\text{C}_6\text{H}_5\left\{\begin{array}{l} (\text{NO}_2)_2 \\ \text{N}=\text{N}[\text{C}_2\text{H}_5]_2 \end{array}\right\}\left\{\begin{array}{l} [2]\text{SO}_2\text{Na} \\ [4]\text{N}(\text{C}_2\text{H}_5)_2 \end{array}\right\}$	B	0	
59a	WOOL VIOLET B.....	Q	308	
60	AZO PHOSPHINE GO.....1895 Chloride of m-trimethylamidobenzene-azo-resorcin. $\text{C}_6\text{H}_5\left\{\begin{array}{l} [3]\text{N}(\text{CH}_3)_3\text{Cl} \\ [1]\text{N}=\text{N}[\text{C}_6\text{H}_5] \end{array}\right\}\left\{\begin{array}{l} [2]\text{OH} \\ [4]\text{OH} \end{array}\right\}$ (Usually mixed with the para compound.)	M	50	
61	VICTORIA VIOLET.....1891 Sodium salt of p-amidobenzene-azo-1,8-dioxynaphthalene-disulphonic acid. $\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \\ [7]\text{N}=\text{N}-\text{C}_6\text{H}_4(\text{NH}_2) \\ [8]\text{OH} \end{array}\right\}$ Ethyl Acid Violet S 4 BXX..... Victoria Violet 4 BS..... Azo Wool Blue 15 B 931 (S. 1902; S. H. IV, 1417.) (Current marks, B, C, SE, SER.) Azo Wool Blue 54 C 1907.....1903 Azo Wool Blue 15 B 947..... Victoria Violet 4 BS..... Victoria Violet 4 BSL..... Victoria Violet S 4 B..... Domingo Violet A conc..... Victoria Violet L..... Victoria Violet 4 BS (Kal. 1910).....	B By C	47,128	\$10,008
61a	VICTORIA VIOLET B base.....	B	4,599	
61b	VICTORIA VIOLET RL (S.; Kal. 1911).....	M	250	
61c	VICTORIA VIOLET 10190.....	BK	331	
61d	FAST VICTORIA VIOLET S 4 B.....	GrE	79	
62	AZOGALLEINE.....1894 p-Dimethylamido-benzene-azo-pyrogallol.	G	0	
63	AZO ACID BLUE.....1904 From p-amido-dimethyl-aniline and 1,8-dioxynaphthalene-4-sulphonic acid. Ethyl Acid Blue RR..... Azo Acid Blue B extra..... Azo Acid Blue B..... Azo Acid Blue B 15 per cent red..... Azo Acid Blue B conc.....	B K M M S	44,255	2,546
63a	AZO ACID BLUE 2 G (S.; Kal. 1909).....	By	300	
63b	BRILLIANT AZO ACID BLUE 3 G.....	S	540	
64	LANAFUCHSINE.....1897 Sodium salt of p-acetyl-amido-benzene-azo- $\alpha$ -naphthol-3,6-disulphonic acid. $\text{CH}_3\text{CO.NH}[4]\text{C}_6\text{H}_4[1]-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{array}\right\}$ Sorbin Red..... Sorbin Red X..... Lanafuchsine 64 G 2168..... (Current marks, 3 B, 6 B, BBS, SB, SG.) Lanafuchsine 64 H 2169..... Lanafuchsine 63 W 2158..... Lanafuchsine 63 X 2159..... Lanafuchsine 63 Y 2160..... Azo Acid Red BA..... Wool Red SB.....	B B C C C C C M CG	68,055	2,375

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
64a	AZO ACID RED 5 B (S. 1907).....	M	250	
64b	AZO ACID MAGENTA G (S.-Preparation)..... 1891	M	10,000	
65	AZO CORALLINE..... 1884 Sodium salt of p-acetamidobenzene-azo- $\beta$ -naphthol-disul- phonic acid R.	WD	0	
66	AMIDO NAPHTHOL RED 6 B..... 1902 From p-amido-acetanilide and acetyl-H-acid.	M	6,500	
66a	AMIDO NAPHTHOL RED 2 B (S. 1902).....	M	36,000	
66b	BRILLIANT ACID CARMINE..... Brilliant Acid Carmine B (S.)..... Brilliant Acid Carmine BOO.....	GrE GrE	2,996	\$758
66c	FAST BRILLIANT ACID CARMINE 6 B.....	GrE	201	
67	CHROMOTROPE 6 B..... 1890 Sodium salt of p-acetamidobenzene-azo-1.8-dioxy-naphtha- lene-disulphonic acid.	M	1,500	
	$\text{C}_{10}\text{H}_7 \begin{Bmatrix} \text{[1] OH} \\ \text{[2] N=N-C}_6\text{H}_4\text{NH(COCH}_3\text{)} \\ \text{[3] SO}_3\text{Na} \\ \text{[6] SO}_3\text{Na} \\ \text{[8] OH} \end{Bmatrix}$			
67a	FAST ACID RED (V. M.)..... Fast Acid Red EB extra (S. 1905)..... Fast Acid Red FGG (Kal. 1913)..... Fast Acid Red RH (S.; Kal. 1912).....	L L H	1,318	330
68	YELLOW FAT COLOR..... 1877 From o-diazoamido-toluene and o-toluidine hydrochloride.		0	
69	CHRYSOIDINE R..... 1876 Hydrochloride of toluene-azo-m-toluyene-diamine.	C	0	
70	BRILLIANT ORANGE O..... 1879 Sodium salt of toluene-azo- $\beta$ -naphthol-sulphonic acid. $\text{C}_6\text{H}_4(\text{CH}_3)\text{-N=N-[1] C}_{10}\text{H}_7 \begin{Bmatrix} \text{[2] OH} \\ \text{[6] SO}_3\text{Na} \end{Bmatrix}$ Orange GT..... Brilliant Orange O.....	By M	21,490	8,236
71	AZO FUCHSINE B..... 1889 Sodium salt of toluene-azo-1.8-dioxynaphthalene-sulphonic acid.	By	0	
72	PIGMENT ORANGE R..... 1904 Action of diazotised p-nitro-o-toluidine upon $\beta$ -naphthol.	M	0	
73	HELIO FAST RED..... 1908 From m-nitro-p-toluidine and $\beta$ -naphthol. Helio Fast Red RL powder..... Helio Fast Red RL extra paste 27429 (Kal. 1907)..... Helio Fast Red TRL 28352 paste.....	By By By	13,413	2,141
73a	LITHOL FAST SCARLET..... Lithol Fast Scarlet B paste (S.; R. Staebler, 107). (Pigment).. Lithol Fast Scarlet G paste..... Lithol Fast Scarlet RN powder..... Lithol Fast Scarlet RN paste (S.).....	B B B B	36,295	9,287
74	TANNIN ORANGE..... 1892 o-Dimethylamido-toluene-azo- $\beta$ -naphthol, mixed with the para compound. $\text{C}_6\text{H}_4 \begin{Bmatrix} \text{[2] or [4] CH}_3\text{N(CH}_3\text{)}_2 \\ \text{[1] N=N [1] C}_{10}\text{H}_7 \text{[2] OH} \end{Bmatrix}$ (Current marks, GG, R.)	C	2,202	1,140



## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
75	NEW PHOSPHINE G.....1892 o-Dimethylamido-toluene-azo-resorcin, mixed with the para compound. $\text{C}_6\text{H}_4 \left\{ \begin{array}{l} [2] \text{ or } [4] \text{ CH}_3\text{-N(CH}_3)_2 \\ [1] \text{ N-N } [1] \text{ C}_6\text{H}_4(\text{OH})_2 [2:4] \end{array} \right.$	C	500	
76	SUDAN II.....1883 Xylene-azo- $\beta$ -naphthol.	A	0	
76a	SCARLET (V. M.)..... Scarlet 231. (Current mark, G.)..... Scarlet 243. (Current mark, G.).....	CJ CJ	501	\$142
77	AZO COCCINE 2 R.....1882 Sodium salt of xylene-azo-1-naphthol-p-sulphonic acid.	A	0	
78	COCHINEAL SCARLET 4 R.....1883 Sodium salt of xylene-azo-1-naphthol-5-sulphonic acid. $\text{C}_6\text{H}_3(\text{CH}_3)_2\text{-N=N-C}_{10}\text{H}_6 \left\{ \begin{array}{l} [1] \text{ OH} \\ [5] \text{ SO}_2\text{Na} \end{array} \right.$	Sch	0	
79	XYLIDINE ORANGE RR conc.....1879 Sodium salt of xylene-azo- $\beta$ -naphthol-6-sulphonic acid. $\text{C}_6\text{H}_3(\text{CH}_3)_2\text{-N=N-[1]C}_{10}\text{H}_6 \left\{ \begin{array}{l} [2] \text{ OH} \\ [6] \text{ SO}_2\text{Na} \end{array} \right.$	BK	3,307	
79a	ORANGE NA.....	Gr E	897	
80	WOOL SCARLET R.....1885 Sodium salt of xylene-azo- $\alpha$ -naphthol-4.8-disulphonic acid. $\text{C}_6\text{H}_3(\text{CH}_3)_2\text{-N=N-[2]C}_{10}\text{H}_4 \left\{ \begin{array}{l} [1] \text{ OH} \\ [4] \text{ SO}_2\text{Na} \\ [8] \text{ SO}_2\text{Na} \end{array} \right.$	Sch	0	
80a	WOOL SCARLET (V. M.)..... Wool Scarlet 4 R conc..... Wool Scarlet 270..... Wool Scarlet 285..... Wool Scarlet 390..... Wool Scarlet 5 B.....	BK Lev Lev Lev H	39,668	6,233
81	BRILLIANT COCHINEAL.....1886 Sodium salt of m-xylene-azo- $\alpha$ -naphthol-3.6-disulphonic acid. $\text{C}_6\text{H}_3(\text{CH}_3)_2\text{-N=N-[2]C}_{10}\text{H}_4 \left\{ \begin{array}{l} \text{OH} [1] \\ (\text{SO}_2\text{Na})_2 [3:6] \end{array} \right.$ Palatine Scarlet A..... Brilliant Cochineal 61 J 2093..... Brilliant Cochineal 61 K 2091.....	B C C	4,297	577
81a	PALATINE SCARLET (V. M.)..... Palatine Scarlet G (for La' e)..... Palatine Scarlet 3 R (S. Composition)..... Palatine Scarlet 4 R.....	B B B	3,114	483
81b	COCHINEAL.....	P	99	
82	PONCEAU 2 R.....1878 Sodium salt of xylene-azo- $\beta$ -naphthol-3.6-disulphonic acid. $\text{C}_6\text{H}_3(\text{CH}_3)_2\text{-N=N-[1]C}_{10}\text{H}_4 \left\{ \begin{array}{l} [2] \text{ OH} \\ [3] \text{ SO}_2\text{Na} \\ [6] \text{ SO}_2\text{Na} \end{array} \right.$ Ponceau S 2 R..... Ponceau 2 RL (Kal. 1914)..... Ponceau 2 R..... Ponceau 2 R..... Scarlet RR..... Ponceau 2 R.....	B By tM P H Q	8,105	958
82a	PONCEAU (V. M.)..... Ponceau RL..... Ponceau 2 RL..... Ponceau 2 RLH..... Ponceau 3 RL extra 80 : 100.....	A A A A A	20,972	1,931

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
82b	PONCEAU X.....	BK	551	
82c	PONCEAU (free from arsenic).....	WD	220	
82d	SCARLET RD.....	H	5,401	
83	PONCEAU 3 R.....1878 Sodium salt of <i>p</i> -cumene-azo- <i>β</i> -naphthol-3,6-disulphonic acid. $\begin{array}{c} \begin{array}{l} \text{[5]CH}_3 \\ \text{[4]CH}_3 \\ \text{C}_6\text{H}_5 \\ \text{[2]CH}_3 \\ \text{[1]N=N-C}_{10}\text{H}_7 \end{array} \begin{array}{l} \text{[2]OH} \\ \text{[3]SO}_3\text{Na} \\ \text{[6]SO}_3\text{Na} \end{array} \end{array}$ Ponceau 3 R conc..... Ponceau 3 R.....	By Lev	953	396
83a	PONCEAU (V. M.)..... Ponceau XB. (Current marks, GR, 2 R, 3 R, 4 R.)..... Ponceau 1608.....	K K	2,604	250
84	AZO CHROMINE.....1893 Tetra-oxy-azo-benzene.	G	0	
85	OMEGA CHROME BLACK.....1905 From <i>o</i> -diazophenols and aryl-1,8-naphthylamine-sulphonic acids.	S	0	
86	AZARINE S.....1883 Ammonium bisulphite compound of dichloro-phenol-azo- <i>β</i> -naphthol.	M	0	
87	PERI WOOL BLUE.....1901 Action of diazotised nitro-amido-phenols upon peri (1,8) derivatives of naphthalene.	C	0	
88	ACID ANTHRACENE BROWN R.....1899 Action of diazotised picramic acid upon substituted phenylene-diamine-sulphonic acids.	By	2,498	
88a	ACID ANTHRACENE BROWN (V. M.)..... Acid Anthracene Brown M..... Acid Anthracene Brown F (S.; Kal. 1912)..... Acid Anthracene Brown PG..... Acid Anthracene Brown RH extra (S.; Kal. 1907)..... Acid Anthracene Brown W (S. H. IV, 1497).....1900 Acid Anthracene Brown WSG.....	By By By By By By	30,555	7,533
89	METACHROME BROWN B powder.....1900 Action of diazotised picramic acid upon dinitro-phenol-azo-m-tolylene-diamine. $\text{HO.C}_6\text{H}_3(\text{NO}_2)_2\text{--N=N--C}_6\text{H}_3(\text{CH}_3)(\text{NH}_2)_2$	A	1,001	
90	CHROME BROWN P.....1903 Dinitro-phenol-azo-m-amido-phenol.	P	0	
91	ANTHRACYL CHROME GREEN D.....1902 Action of diazotised picramic acid upon naphthionic acid.	WD	4,596	
92	METACHROME BORDEAUX R.....1902 Action of diazotised picramic acid upon m-amido-aryl-sulphamides.	A	0	
93	SUDAN R..... Action of diazotised <i>o</i> -anisidine upon <i>β</i> -naphthol.	A	99	
94	AZO EOSINE.....1883 Sodium salt of anisol-azo- <i>α</i> -naphthol-4-sulphonic acid. $\text{CH}_3\text{.O.C}_6\text{H}_4\text{--N=N--[2]C}_{10}\text{H}_7 \begin{array}{l} \text{[1]OH} \\ \text{[4]SO}_3\text{Na} \end{array}$	By	1,001	
95	COCHENILLE SCARLET B.....1892 Sodium salt of anisol-azo- <i>α</i> -naphthol-4,8-disulphonic acid. $\text{CH}_3\text{.O.C}_6\text{H}_4\text{--N=N--[2]C}_{10}\text{H}_7 \begin{array}{l} \text{[1]OH} \\ \text{[4]SO}_3\text{Na} \\ \text{[8]SO}_3\text{Na} \end{array}$	WD	952	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
96	CHROME FAST YELLOW 2 G powder.....1895 Action of diazotised o-anisidine upon salicylic acid.	A	150	
96a	CHROME FAST YELLOW (V. M.)..... Chrome Fast Yellow G extra (S. J. 4th ed., 146; S. H. IV, 1467). (Sulphonic acid of the azo dye obtained by the reaction of the condensation product of chrysoidine and benzalde- hyde with salicylic acid.) Chrome Fast Yellow GG 148 per cent (S. J. 4th ed., 146; S. H. IV, 1467)..... Chrome Fast Yellow 5 G (Kal. 1910)..... Chrome Fast Yellow GA..... Chrome Fast Yellow O (S.; Kal. 1910).....	A I I I I	15,165	\$2,056
97	CHLORANISIDINE SCARLET..... Action of diazotised chloranisidine upon $\beta$ -naphthol.	M	0	
98	NITROSAMINE PINK BXF.....1897 Action of diazotised p-nitro-o-anisidine upon $\beta$ -naphthol.	B	99	
99	TUSCALINE ORANGE G..... Action of diazotised m-nitro-o-anisidine upon $\beta$ -naphthol.	B	0	
100	EOSAMINE B.....1894 Sodium salt of p-cresol-methyl-ether-azo-1-naphthol-3,6-disul- phonic acid. $\text{C}_6\text{H}_5 \begin{Bmatrix} (1)\text{N}=\text{N}(2)\text{C}_6\text{H}_4 \\ (2)\text{OCH}_3 \\ (5)\text{CH}_3 \end{Bmatrix} \begin{Bmatrix} (1)\text{OH} \\ (3)\text{SO}_3\text{Na} \\ (6)\text{SO}_3\text{Na} \end{Bmatrix}$ Eosamine B..... Eosamine G.....	A A	1,914	\$12
101	COCCININE B.....1878 Sodium salt of p-methoxy-toluene-azo-2-naphthol-3,6-disul- phonic acid.	M	0	
102	DIAMOND FLAVINE G.....1891 p-Oxydiphenyl-azo-salicylic acid. $\text{C}_6\text{H}_4.\text{OH}$ $\text{C}_6\text{H}_4.\text{N}_2.\text{C}_6\text{H}_3(\text{OH})(\text{CO}_2\text{H})[1:4:3]$	By	23,998	
103	DUTCH YELLOW.....1891 Action of diazotised benzidine upon salicylic acid; followed by treatment with sodium sulphite.	FA	0	
104	BENZOYL PINK.....1891 Sodium salt of benzoyl-amido-ditolyl-azo-1-naphthol-4-sul- phonic acid.	P	0	
105	SUDAN BROWN.....1878 $\alpha$ -Naphthalene-azo- $\alpha$ -naphthol.	A	0	
106	AUTOL RED RLP paste..... $\alpha$ -Naphthalene-azo- $\beta$ -naphthol. $\text{C}_{10}\text{H}_7[\alpha]\text{N}=\text{N}-\text{C}_{10}\text{H}_7(\text{OH})[\beta]$	B	3,876	
106a	SCARLET 2 RI.....	AW	1,235	
106b	SCARLET 4 RI.....	AW	1,254	
106c	RED BROWN.....	S	110	
107	SULPHAMINE BROWN A.....1894 Action of diazotised $\alpha$ -naphthylamine upon the sodium bisul- phite compound of nitroso- $\beta$ -naphthol.	WD	122	
108	DOUBLE PONCEAU R.....1897 Action of diazotised $\alpha$ -naphthylamine upon 1-naphthol-5-sul- phonic acid.	By	0	
109	PALATINE RED A.....1896 Sodium salt of $\alpha$ -naphthalene-azo-1-naphthol-3,6-disulphonic acid. $\text{C}_{10}\text{H}_7[1]\text{N}=\text{N}-\text{C}_{10}\text{H}_7 \begin{Bmatrix} (\text{OH})[1] \\ (\text{SO}_3\text{Na})_2[3:6] \end{Bmatrix}$	B	300	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
110	BUFFALO RUBINE.....1884 Sodium salt of $\alpha$ -naphthalene-azo-1-naphthol-4.8-disulphonic acid. $C_{10}H_7(\alpha)N=N-C_{10}H_4\left\{\begin{array}{l} [1]OH \\ [3]SO_2Na \end{array}\right.$ [N <sub>2</sub> : OH: SO <sub>2</sub> H: SO <sub>2</sub> H=2:1:4:8]	Sch	0	
111	FAST RED BT.....1878 Sodium salt of $\alpha$ -naphthalene-azo-2-naphthol-6-sulphonic acid.	By	0	
112	BORDEAUX B.....1878 Sodium salt of $\alpha$ -naphthalene-azo-2-naphthol-3.6-disulphonic acid. $C_{10}H_7(1)N=N-[1]C_{10}H_4\left\{\begin{array}{l} [2]OH \\ [3]SO_2Na \\ [6]SO_2Na \end{array}\right.$ Bordeaux B extra..... Fast Red BN..... Bordeaux R..... Bordeaux B conc. 150 per cent..... Bordeaux BR..... Bordeaux G double conc..... Bordeaux R conc..... Bordeaux 5005.....	..... A B K BK BK BK BK BK BK	10,383	\$1,474
112a	CLARET RED B..... Claret Red B..... Claret Red B (for lake)..... Claret Red BO (for lake)..... Claret Red X conc.....	M M M M	14,338	1,291
112b	BORDEAUX 265.....	Q	1,100	261
113	CRYSTAL PONCEAU.....1883 Sodium salt of $\alpha$ -naphthalene-azo-2-naphthol-6.8-disulphonic acid. $C_{10}H_7(1)N=N-[1]C_{10}H_4\left\{\begin{array}{l} [2]OH \\ [6]SO_2Na \\ [8]SO_2Na \end{array}\right.$ Crystal Ponceau 6 R..... Crystal Ponceau..... Crystal Ponceau 6 R.....	..... A B BK	628	128
114	CHROMOTROPE 10 B.....1890 Sodium salt of $\alpha$ -naphthalene-azo-1.8-dioxynaphthalene-3.6-disulphonic acid.	M	0	
115	AZO TURKISH RED.....1888 Action of diazotised $\beta$ -naphthylamine upon $\beta$ -naphthol.	GrE	0	
116	SULPHAMINE BROWN B.....1894 Action of diazotised $\beta$ -naphthylamine upon the sodium bisulphite compound of nitroso- $\beta$ -naphthol.	WD	0	
117	ERICA 2 GN.....1888 Action of diazotised dehydro-thio-p-toluidine upon $\alpha$ -naphthol-3.8-disulphonic acid.	A	1,171	
118	GERANINE.....1890 Action of diazotised dehydro-p-toluidine upon 1-naphthol-4.8-disulphonic acid, or upon 1-naphthol-3-sulphonic acid, or upon 1.8-dioxynaphthalene-4-sulphonic acid. Geranine G..... Brilliant Geranine B.....	..... By By	18,917	6,000
119	DIAMINE ROSE (V. M.).....1893 Sodium salt of benzenyl-amido-thio-phenol-azo-8-chloro-1-naphthol-3.6-disulphonic acid. $C_6H_5\left\{\begin{array}{l} [1]CH_3 \\ [3]S \\ [4]N \end{array}\right\} \equiv C(1)C_6H_4(4)N_4(2)C_{10}H_7\left\{\begin{array}{l} [1]OH \\ [2]SO_2Na \\ [3]SO_2Na \\ [5]Cl \end{array}\right.$ Diamine Rose 62 E 2114. (Current marks, B, BD, BG, FFB, GD, GGN, RD.) Diamine Rose 62 H 2117..... Diamine Rose 62 L 2121.....	..... C C C	5,260	2,167

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
120	SALMON RED.....1891 Sodium salt of methyl-benzanyl-amido-thio-xylanol-azo-2-naphthylamine-3,6-disulphonic acid.	A	0	
121	ERICA B.....1888 Sodium salt of methyl-benzanyl-amido-thio-xylanol-azo-1-naphthol-3,8-disulphonic acid. $\text{C}_6\text{H}_5 \begin{Bmatrix} (1)\text{CH}_3 \\ (3)\text{CH}_3 \\ (5)\text{S} \\ (6)\text{N} \end{Bmatrix} = \text{C} \begin{Bmatrix} (1)\text{N}=\text{N}-\text{C}_6\text{H}_4 \\ (3)\text{CH}_3 \end{Bmatrix} \begin{Bmatrix} (1)\text{OH} \\ (3)\text{SO}_2\text{Na} \\ (8)\text{SO}_2\text{Na} \end{Bmatrix}$ Erica B extra..... Erica BN..... Erica BB..... Erica BB conc.....	A A S S	5,340	\$2,927
122	ERICA G.....1888 Action of diazotised dehydro-thio-m-xyldine upon 2-naphthol-6,8-disulphonic acid. Erica G extra..... Erica GN.....	A A	2,051	1,300
122a	ERICA G (V.M.)..... Erica G..... Erica G conc. 5:10.....	S S S	319	106
123	EMIN RED.....1891 Sodium salt of methyl-benzanyl-amido-thio-xylanol-azo-2-naphthol-7-sulphonic acid.	A	0	
124	DIAZINE GREEN S.....1897 Chloride of safranine-azo-dimethylaniline. $\text{S}-\text{N}=\text{N}-\text{C}_6\text{H}_4.\text{N}(\text{CH}_3)_2$ (S= residue of safranine.)	K	1,340	
125	DIAZINE BLACK 1401.....1896 (Current marks, G, 2 G, R.) Safranine-azo-phenol. $\text{S}-\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{OH}$ (S= residue of safranine.)	K	2,630	
126	INDOINE BLUE R.....1891 Safranine-azo-β-naphthol. $\text{S}-\text{N}=\text{N}-\text{C}_{10}\text{H}_7.\text{OH}(\beta)$ (S= residue of safranine.)	B	0	
126a	UNION BLUE (V. M.)..... Union Blue 42 D 1608 (Kal. 1907). (Current marks, 2 B, BJ, FN, J, R.J.) Union Blue R..... Union Blue H.....	C K S	15,353	2,116
127	METHYL INDONE B.....1895 Action of diazotised safranine upon amidonaphthol.	C	0	
128	JANUS GRAY B.....1897 A derivative of safranine.	M	0	
129	CHROMAZONE RED (New) conc.....1895 Sodium salt of benzaldehyde-azo-1,8-dihydroxy-naphthalene-3,6-disulphonic acid. $\text{C}_{10}\text{H}_7 \begin{Bmatrix} (1)\text{OH} \\ (2)\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{COH} \\ (3)\text{SO}_2\text{Na} \\ (6)\text{SO}_2\text{Na} \\ (8)\text{OH} \end{Bmatrix}$	G	243	
130	CHROMAZONE BLUE R.....1895 Ethyl-phenyl-hydrazone of Chromazone Red, No. 129.	G	0	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
131	PERMANENT ORANGE R. Action of diazotised m-chloraniline-o-sulphonic acid upon $\beta$ -naphthol.	A	0	
132	LAK <sup>W</sup> RED P.....1901 Action of p-nitraniline-o-sulphonic acid upon $\beta$ -naphthol.	M	60,345	
133	ERIOCHROME PHOSPHINE R.....1909 Sodium salt of nitro-sulphobenzene-azo-salicylic acid. $\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [1]\text{NO}_2 \\ [3]\text{SO}_2\text{Na} \\ [4]\text{N}=\text{N}-\text{C}_6\text{H}_5 \end{array} \right\} \begin{array}{l} \text{OH} \\ \text{CO}_2\text{H} \end{array}$	G	1,433	
134	METANIL YELLOW.....1879 Sodium salt of m-sulphobenzene-azo-diphenylamine. $\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3]\text{SO}_2\text{Na} \\ [1]\text{N}=\text{N}-[1]\text{C}_6\text{H}_4[4]\text{NH.C}_6\text{H}_5 \end{array} \right\}$ Metanil Yellow extra..... Metanil Yellow extra..... Metanil Yellow PL..... Metanil Yellow PL conc..... Metanil Yellow PLG..... Metanil Yellow conc..... Metanil Yellow extra..... Victoria Yellow conc..... Metanil Yellow..... Metanil Yellow 23380..... Metanil Yellow 90 per cent 27733..... Metanil Yellow 37881..... Metanil Yellow GR extra conc..... Metanil Yellow X..... Metanil Yellow 07777..... Metanil Yellow extra strong..... Metanil Yellow extra conc..... Metanil Yellow extra strong.....		234,606	\$46,614
135	JAUNE MÉTANILE BROMÉ.....1882 Action of bromine on Metanil Yellow, No. 134.	P	0	
136	ACID YELLOW GG..... A sulphonic acid of Metanil Yellow, No. 134.	GrE	0	
137	ACID YELLOW.....1877 Mixture of sodium amidoazobenzene-disulphonate with some sodium amidoazobenzene-monosulphonate. Chief constituent: $\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4]\text{SO}_2\text{Na} \\ [1]\text{N}=\text{N}[1]\text{C}_6\text{H}_5 \end{array} \right\} \left\{ \begin{array}{l} [4]\text{NH}_2 \\ [3]\text{SO}_2\text{Na} \end{array} \right\}$ Acid Yellow..... Acid Yellow G..... Fast Yellow..... Fast Yellow Y..... Fast Yellow extra..... Fast Yellow S..... Acid Yellow A.C..... Acid Yellow LR..... Acid Yellow G..... Fast Yellow GR conc..... Fast Yellow 81..... Fast Yellow 08565..... Acid Yellow extra strong..... Acid Yellow conc..... Yellow 2 S..... Acid Yellow G..... Fast Yellow FY..... Acid Yellow GF..... Acid Yellow 41471..... Acid Yellow FY..... Acid Yellow G..... Fast Yellow 95..... Solid Yellow G.....		35,982	6,313
137a	FAST ACID YELLOW RH.....	H	1,396	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
138	METHYL ORANGE.....1875 Sodium salt of p-sulphobenzene-azo-dimethylaniline. $C_6H_4 \begin{smallmatrix} [4]SO_3Na \\ [1]N=N-[1]C_6H_4[4]N(CH_3)_2 \end{smallmatrix}$	tM	500	
139	ORANGE IV.....1876 Sodium salt of p-sulphobenzene-azo-diphenylamine. $C_6H_4 \begin{smallmatrix} [4]SO_3Na \\ [1]N=N-[1]C_6H_4[4]NH.C_6H_5 \end{smallmatrix}$ Acid Yellow D extra..... Orange IV..... Orange IV..... Orange IV 50 SED..... Orange IV..... Orange 4..... Orange IV powder..... Orange N..... Orange GS..... Tropaeoline OO.....	A B K K K tM P G I H H	11,238	\$1,006
139a	ORANGE (V. M.)..... Orange G. (Current marks, I, T.)..... Orange GC..... Orange 2 R..... Orange 1095..... Orange 1553..... Orange 1555..... Orange 1557..... Orange 1560.....	K K K K K K K K K	7,733	1,067
140	CURCUMEINE.....1890 A mixture of 3 isomeric mononitro derivatives of Orange IV, No. 139, and 2 isomeric dinitro-diphenylamines. Curcumeine extra..... Curcumeine S extra 50:100..... Curcumeine S..... Azo Flavine RS..... Azo Flavine RS new..... Indian Yellow R conc..... Curcumeine GG conc..... Curcumeine superfine conc..... Citronine GOOO..... Citronine 2 ROOOO..... Azo Flavine 3 R extra.....	A A A B B By BK BK GrE GrE tM	39,899	6,267
140a	CHROMOCITRONINE R powder.....	DH	600	
141	AZO YELLOW.....1890 A mixture of 2 isomeric dinitro derivatives of Orange IV, No. 139, a small amount of a trinitro derivative of Orange IV, 2 isomeric dinitro-diphenylamines, and a trinitro-diphenylamine. Azo Acid Yellow..... Azo Flavine S..... Indian Yellow G..... Indian Yellow GN (S.; Kal. 1908; 1914)..... Azo Yellow 44 44 SU X..... Azo Yellow conc..... Citronine GOO conc..... Azo Yellow 3 G extra..... Heliathine G conc..... Heliathine GFF..... Heliathine GFF superfine..... Heliathine R conc..... Azo Yellow.....	A B By By K M L tM G G G G Q	59,894	13,755
141a	AZO FLAVINE (V. M.)..... Azo Flavine CX..... Azo Flavine FF (S. 1897)..... Azo Flavine SG ex. (S. 1897)..... Azo Flavine GX new..... Azo Flavine new RX..... Azo Flavine 2 RNH..... Azo Flavine 3 R..... Azo Flavine SGR extra.....	B B B B B B B B B	20,114	3,151

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
141b	INDIAN YELLOW (V. M.)..... Indian Yellow 17 J 988 (S.; Kal. 1905) (Current marks, FF, G, R.) Indian Yellow V 189..... Indian Yellow W 190..... Indian Yellow 17 Z 1004.....	C C C C	10, 537	\$2, 322
141c	AZO YELLOW (V. M.)..... Azo Yellow 3 A extra conc. Azo Yellow 3 AN extra conc. Azo Yellow 3 Y extra conc.	tM tM tM	9, 685	2, 307
141d	YELLOW (V. M.)..... Yellow R..... Yellow 145..... Yellow 10279..... Yellow 10280.....	W I I I I	14, 439	4, 752
142	CURCUMINE..... Sodium salt of p-sulphobenzene-azo-diphenylamine-sulphonic acid. Brilliant Yellow..... Curcumine extra..... Curcumine L conc.....	tM tM G	1, 622	469
142a	YELLOW CP..... Yellow CP 32 A..... Yellow CP 131 A.....	Lev Lev	8, 312	1, 241
143	TROPEOLINE.....1875 Sodium salt of p-sulphobenzene-azo-resorcin. $\text{C}_6\text{H}_4\left\{\begin{array}{l} [4]\text{SO}_3\text{Na} \\ [1]\text{N}=\text{N}-[4]\text{C}_6\text{H}_4\left\{\begin{array}{l} [1]\text{OH} \\ [3]\text{OH} \end{array}\right. \end{array}\right.$ Tropaeoline 17 N 992. (Current marks, D, G, O, OO, R, RN, RNP, Y.) Tropaeoline NN 617..... Tropaeoline 16 O 968..... Tropaeoline 232.....	C C C C	6, 252	1, 225
144	ORANGE I.....1876 Sodium salt of p-sulphobenzene-azo- $\alpha$ -naphthol. $\text{C}_6\text{H}_4\left\{\begin{array}{l} [4]\text{SO}_3\text{Na} \\ [1]\text{N}=\text{N}-[4]\text{C}_{10}\text{H}_7[1]\text{OH} \end{array}\right.$ Naphthol Orange..... Orange I conc..... Orange S..... Orange I conc. 24765..... Orange I 51..... Orange I 52..... Orange I 102..... Naphthol Orange 12791.....	A B B By tM tM tM I	6, 101	760
144a	ORANGE GD extra. (Current mark, B.).....	I.	2, 204	
145	ORANGE II.....1876 Sodium salt of p-sulphobenzene-azo- $\beta$ -naphthol. $\text{C}_6\text{H}_4\left\{\begin{array}{l} [4]\text{SO}_3\text{Na} \\ [1]\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_7[2]\text{OH}+5\text{H}_2\text{O} \end{array}\right.$ Orange II..... Orange II conc..... Orange II extra conc..... Orange II P..... Golden Orange..... Orange II.....	B B B B By K	127, 550	10, 116
145a	ORANGE PC..... Orange PC..... Orange PC paste.....	DH G	1, 327	237



## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
146	<b>AZO FUCHSINE G</b> .....1889 Sodium salt of p-sulpho-benzene-azo-dioxy-naphthalene-sulphonic acid. $\text{C}_6\text{H}_4\left\{\begin{array}{l} [4]\text{SO}_2\text{Na} \\ [1]-\text{N}-\text{N}[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{OH} \\ [8]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array}\right. \end{array}\right.$ Azo Fuchsine G..... Azo Fuchsine 4 G extra (S.; Kal. 1910)..... Azo Magenta G.....	By By CV	17,819	\$2,885
147	<b>AZO FUCHSINE 6 B</b> .....1900 Similar in composition to Azo Fuchsine B, No. 71, and to Azo Fuchsine G, No. 146. Azo Fuchsine 6 B..... Azo Fuchsine 6 B extra..... Azo Fuchsine GN.....	By By By	12,306	1,867
148	<b>FAST ORANGE O</b> .....1901 Action of diazotised o-nitraniline-p-sulphonic acid upon $\beta$ -naphthol.	M	1,280	
149	<b>FAST YELLOW R</b> .....1878 Sodium salt of amido-azo-toluene-disulphonic acid.	K	0	
150	<b>FAST YELLOW N</b> .....1878 Sodium salt of sulpho-p-toluene-azo-diphenylamine.	P	0	
151	<b>ORANGE R</b> .....1886 Sodium salt of sulpho-o-toluene-azo- $\beta$ -naphthol. $\text{C}_6\text{H}_4(\text{SO}_2\text{Na})\left\{\begin{array}{l} [2]\text{CH}_3 \\ [1]\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_7[2]\text{OH} \end{array}\right.$	B	600	
151a	<b>ORANGE RO</b> ..... Orange RO (S. 1904; S. H. IV, 2413)..... Orange RO conc.....	B B	90,147	7,286
152	<b>PERMANENT RED 4 B</b> .....1903 Action of diazotised p-toluidine-o-sulphonic acid upon $\beta$ -oxy-naphtholic acid. Permanent Red 4 B extra powder..... Permanent Red 4 B paste..... Lithol Rubine BN powder (S.).....	A A B	44,860	14,612
152a	<b>PERMANENT RED (V. M.)</b> ..... Permanent Red B extra powder (S.)..... Permanent Red 2 B extra powder (S.; Kal. 1914)..... Permanent Red 2 B paste..... Permanent Red R extra powder..... Permanent Red R extra lumps..... Permanent Red R paste (S.; Kal. 1910)..... Permanent Red 4 R extra lumps (S.).....	A A A A A A A	56,545	7,408
153	<b>LAKE RED C extra (S.; S. H. IV, 2467)</b> .....1902 Action of diazotised 2-chloro-5-toluidine-4-sulphonic acid upon $\beta$ -naphthol.	M	306,607	
154	<b>PALATINE CHROME BROWN</b> .....1893 Sodium salt of p-sulpho-o-hydroxybenzene-azo-m-phenylenediamine. $\text{C}_6\text{H}_3\left\{\begin{array}{l} [1]\text{N}=\text{N}-\text{C}_6\text{H}_3(\text{NH}_2)_2 \\ [2]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array}\right.$ Palatine Chrome Brown W powder..... Palatine Chrome Brown WN..... Palatine Chrome Brown WNR..... Palatine Chrome Brown WNRTX..... Anthracyl Chrome Brown D.....	B B B B WD	7,100	1,962
154a	<b>PALATINE CHROME BROWN (V. M.)</b> ..... Palatine Chrome Brown GGX (S.; Kal. 1912; formula for preparation)..... Palatine Chrome Brown GGTX..... Palatine Chrome Brown 6 G..... Palatine Chrome Brown R.....	B B B B	11,155	2,712

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
155	ACID ALIZARIN GARNET R.....1901 Action of diazotised o-amidophenol-p-sulphonic acid upon resorcin.	M	0	
156	PALATINE CHROME VIOLET.....1893 Action of diazotised o-amidophenol-p-sulphonic acid upon β-naphthol.	B	1,199	
157	DIAMOND BLACK.....1902 Action of diazotised o-amidophenol-p-sulphonic acid upon 1,5-dioxynaphthalene. Diamond Black P 2 B conc. (Kal. 1905)..... Diamond Black PV..... Diamond Black PV paste..... Diamond Black PVT (Kal. 1912).....	By By By By	235,074	\$37,055
158	CHROME BROWN RR.....1893 Sodium salt of disulpho-oxybenzene-azo-pyrogallol. $\text{C}_6\text{H}_3 \begin{Bmatrix} [4]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [5]\text{SO}_2\text{Na} \\ [1]\text{N}=\text{N} \end{Bmatrix} \text{C}_6\text{H}_3 \begin{Bmatrix} [4]\text{OH} \\ [3]\text{OH} \\ [2]\text{OH} \end{Bmatrix}$	G	0	
158a	CHROME BROWN (V. M.)..... Chrome Brown CS..... Chrome Brown 2813..... Chrome Brown extra..... Chrome Gallus Brown RR paste..... Chrome Brown 414.....	K K AW G Lev	7,341	1,940
159	ACID ALIZARIN BLACK.....1901 Sodium salt of nitro-sulphophenol-azo-β-naphthol. $\text{C}_6\text{H}_3 \begin{Bmatrix} [1]\text{OH} \\ [2]\text{N}=\text{N}-\text{C}_{10}\text{H}_7\text{OH}(\beta) \\ [4]\text{SO}_2\text{Na} \\ [6]\text{NO}_2 \end{Bmatrix}$ Acid Alizarin Black (Kal. 1914)..... Acid Alizarin Black R.....	M M	800	525
159a	VIGOREUX FAST BLACK T (S.; Kal. 1911).....	M	16,000	
160	FAST BROWN N.....1878 Sodium salt of p-sulphonaphthalene-azo-α-naphthol. $\text{C}_{10}\text{H}_6 \begin{Bmatrix} [4]\text{SO}_2\text{Na} \\ [1]\text{N}=\text{N}-[4]\text{C}_{10}\text{H}_4[1]\text{OH} \end{Bmatrix}$	B	67,531	
160a	AZO BROWN V (S.).....	M	750	
161	FAST RED A.....1877 Sodium salt of p-sulphonaphthalene-azo-β-naphthol. $\text{C}_{10}\text{H}_6 \begin{Bmatrix} [4]\text{SO}_2\text{Na} \\ [1]\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_4[2]\text{OH} \end{Bmatrix}$ Fast Red A extra 85:100..... Fast Red AV..... Fast Red A..... Fast Red AV 28133..... Roccelline..... Fast Red O..... Fast Red A..... Roccelline MB powder..... Roccelline S..... Roccelline pure extra conc..... Roccelline S..... Fast Red conc..... Cardinal Red J..... Roccelline FS.....	A B By By C M L tM FA G S H H	44,359	5,425
162	BRILLIANT FAST RED G.....1877 Sodium salt of 6-sulphonaphthalene-azo-β-naphthol.	B	0	

### V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
163	<b>AZO RUBINE</b> .....1883 Sodium salt of 4-sulphonaphthalene-azo- $\alpha$ -naphthol-4-sul- phonic acid. $C_{16}H_8\left\{\begin{matrix} [4]SO_2Na \\ [1]N=N-[2]C_{10}H_6\left\{\begin{matrix} [1]OH \\ [4]SO_2Na \end{matrix}\right\} \end{matrix}\right.$ Azo Rubine SG (S. 1902; S. H. IV, 789)..... Carmoisine..... Carmoisine extra..... Fast Red CJ (S.)..... Mars Red A X conc..... Mars Red G X..... Carmoisine B..... Carmoisine B conc..... Azo Rubine 60 Q. 2074. (Current mar., A.)..... Azo Rubine 60 R 2075..... Azo Rubine 60 T 2077..... Azo Acid Rubine 0165. (Current mar.s, B, R.)..... Azo Acid Rubine 1620..... Azo Acid Rubine 1C30..... Brilliant Crimson conc..... Brilliant Crimson N..... Azo Rubine S 200 per cent..... Azo Rubine A extra conc..... Azo Acid Rubine..... Carmoisine conc.....	A A A B B B By By C C C K K K M M GrE tM WD S	160,253	\$32,400
163a	<b>CARMOISINE (V. M.)</b> ..... Crimson BBT..... Carmoisine 3 B..... Carmoisine R..... Carmoisine 6 B (Kal. 1908).....	By By H H	17,107	2,437
163b	<b>CHROME BLUE (V. M.)</b> ..... Chrome Blue ATX..... Chrome Blue RX..... Azo Chrome Blue R..... Chrome Blue 2 B..... Chrome Blue FBX..... Chrome Blue R extra..... Chrome Blue G extra.....	B B K BK BK AW Q	53,404	19,874
164	<b>FAST RED VR conc. 27950</b> ..... Action of diazotised naphthionic acid upon $\alpha$ -naphthol-5-sul- phonic acid.	By	597	
164a	<b>DIAMOND BLUE R</b> .....	By	20,117	
165	<b>AZO RED A</b> ..... Action of diazotised naphthionic acid upon 1-naphthol-3-6- sulphonic acid. Allied to Palatine Red A, No. 109.	C	0	
166	<b>NAPHTHOL RED GR</b> .....1878 Sodium salt of 4-sulphonaphthalene-azo- $\beta$ -naphthol-6-sul- phonic acid $C_{16}H_8\left\{\begin{matrix} [4]SO_2Na \\ [1]N=N-[1]C_{10}H_6\left\{\begin{matrix} [2]OH \\ [6]SO_2Na \end{matrix}\right\} \end{matrix}\right.$	B	1,001	
166a	<b>ACID CRIMSON (V. M.)</b> ..... Acid Crimson..... Acid Crimson D.....	S Q	1,472	300
167	<b>COCCINE</b> .....1882 Sodium salt of 4-sulphonaphthalene-azo- $\beta$ -naphthol-8-sul- phonic acid. $C_{16}H_8\left\{\begin{matrix} [4]SO_2Na \\ [1]N=N-[1]C_{10}H_6\left\{\begin{matrix} [2]OH \\ [8]SO_2Na \end{matrix}\right\} \end{matrix}\right.$ Cocaine 2 BG..... Cocaine 3 BG..... Cocaine Scarlet 2 BX..... Cocaine Scarlet 3 BX..... Cocaine Scarlet 3 BX conc.....	A A By By By By	3,101	333

No.	Commercial and chemical names and formulas.	Manufacturer.	Importation.	
			Pounds.	Value.
168	<b>AMARANTH.</b> ..... 1878 Sodium salt of 4-sulphonaphthalene-azo- $\beta$ -naphthol-disulphonic acid. $C_{10}H_6 \left\{ \begin{array}{l} [4]SO_2Na \\ [1]N=N-[1]C_{10}H_4 \end{array} \right\} \left\{ \begin{array}{l} [2]OH \\ [3]SO_2Na \\ [6]SO_2Na \end{array} \right.$ Naphthol Red S. .... Naphthol Red S conc. .... Bordeaux S. .... Fast Red NS. .... Amaranth. .... Amaranth B (S. H. IV, 1401). .... Amaranth 60 I 2066. .... Amaranth 60 K 2068. .... Naphthol Red 57 G 1987. (Current marks, C, E.B.). .... Naphthol Red 57 H 1988. .... Amaranth D. .... Amaranth D conc. 10 per cent. .... Amaranth SA. .... Bordeaux conc. .... Azo Rubine S. ....	B B A By C C C C C C BK BK tM AW S	73, 973	\$9, 420
168a	<b>NAPHTHYLAMINE RED 3 BM.</b> .....	B	597	
168b	<b>WOOL RED (V. M.).</b> ..... Wool Red (bluish). .... Wool Red (secunda). .... Wool Red CS. .... Wool Red L. .... Wool Red MC. .... Wool Red SOC. .... Wool Red 1604. .... Wool Red 7742. ....	K K K K K K K K BK	11, 497	2, 285
169	<b>COCHINEAL RED.</b> ..... 1878 Sodium salt of 4-sulphonaphthalene-azo- $\beta$ -naphthol-disulphonic acid. $C_{10}H_6 \left\{ \begin{array}{l} [4]SO_2Na \\ [1]N=N-[1]C_{10}H_4 \end{array} \right\} \left\{ \begin{array}{l} [2]OH \\ [6]SO_2Na \\ [8]SO_2Na \end{array} \right.$ New Cocaine. .... Cochineal Red A. .... Brilliant Ponceau 5 R conc. .... Victoria Scarlet 2 R. .... Victoria Scarlet 4 R. .... Victoria Scarlet 4 R conc. .... Ponceau 4 R. .... Victoria. .... Scarlet 50. ....	A B By tM tM tM P G H	29, 984	3, 600
169a	<b>CROCEINE SCARLET (V. M.).</b> ..... Croceine Scarlet 133. (Current marks, B, 2 B, 3 B, 5 B, 7 B, 8 B, 9 B, 10 B, BX, 2 BX, 3 BX, 4 BX, O, R, R.X.). .... Croceine Scarlet 1612. ....	K K	1, 461	339
169b	<b>PONCEAU (V. M.).</b> ..... Ponceau SPJ. .... Ponceau W 3 R. ....	P P	200	24
170	<b>PONCEAU 6 R.</b> ..... 1881 Sodium salt of 4-sulphonaphthalene-azo- $\beta$ -naphthol-trisulphonic acid.	M	0	
171	<b>CHROMOTROPE 8 B.</b> ..... 1890 Sodium salt of 4-sulphonaphthalene-azo-1,8-dioxy-naphthalene-3,6-disulphonic acid.	M	0	
172	<b>FAST BROWN</b> ..... 1882 Sodium salt of sulphonaphthalene-azo- $\alpha$ -naphthol. $C_6H_4 \left\{ \begin{array}{l} [1]SO_2Na \\ [3]N=N-[4]C_{10}H_6[1]OH \end{array} \right.$ Fast Brown 3 B. .... Fast Brown. ....	A A	1, 477	804

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
173	LITHOL RED R.....1900 Sodium salt of sulphonaphthalene-azo- $\beta$ -naphthol. $\text{C}_{10}\text{H}_6\left\{\begin{array}{l} [1]\text{SO}_2\text{Na} \\ [2]\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_4[2]\text{OH} \end{array}\right.$ Lithol Red R paste..... Lithol Red R powder..... Lithol Red R conc. lumps.....	B B B	214,448	\$18,550
173a	LITHOL RED (V. M.)..... Lithol Red 3 B powder (for lakes)..... Lithol Red GG paste (S.; R. Staebler, 109)..... Lithol Red 3 G paste.....1910 Lithol Red RG paste..... Lithol Red RS powder..... Lithol Red 15 per cent (sodium bisulphite comp.).....	B B B B B B	67,515	5,029
174	DOUBLE BRILLIANT SCARLET.....1882 Sodium salt of sulphonaphthalene-azo- $\beta$ -naphthol. $\text{C}_{10}\text{H}_6\left\{\begin{array}{l} [6]\text{SO}_2\text{Na} \\ [2]\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_4[2]\text{OH} \end{array}\right.$ Orange Red Pure (S.)..... Double Brilliant Scarlet G.....	A tM	1,148	256
174a	SCARLET..... Scarlet GRCL..... Scarlet GRCL 25 per cent red..... Scarlet M new..... Scarlet R..... Scarlet 2 R..... Scarlet 3 R 189..... Scarlet 6 R..... Scarlet 6 R cryst..... Scarlet 2 RCL (blue shade)..... Scarlet 3 RCL (blue shade)..... Scarlet 4 RZ.....	M M M M M M M M M M M M	209,231	20,472
175	PONCEAU FOR SILK..... Sodium salt of sulphonaphthalene-azo- $\beta$ -naphthol. $\text{C}_{10}\text{H}_6\left\{\begin{array}{l} \text{SO}_2\text{Na} \\ \text{N}=\text{N}-[1]\text{C}_{10}\text{H}_4[2]\text{OH} \end{array}\right.$ A mixture of $\beta$ -naphthylamine-5-sulphonic acid and of $\beta$ -naphthylamine-8-sulphonic acid is used in the manufacture.	P	397	
175a	PONCEAU (V. M.)..... Ponceau K..... Ponceau 12402.....	I I	330	128
176	SCARLET 2 R.....1882 Sodium salt of sulphonaphthalene-azo- $\alpha$ -naphthol-4-sulphonic acid. $\text{C}_{10}\text{H}_6\left\{\begin{array}{l} [6]\text{SO}_2\text{Na} \\ [2]\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_4\left\{\begin{array}{l} [1]\text{OH} \\ [2]\text{SO}_2\text{Na} \end{array}\right. \end{array}\right.$ Scarlet 2 R..... Scarlet 2 R conc.....	tM tM	7,713	1,069
176a	SCARLET 4 R..... Scarlet 4 R extra conc..... Scarlet 4 R.....	tM P	1,642	230
176b	BRILLIANT DOUBLE SCARLET conc. 9738.....	BK	827	
177	MORDANT YELLOW.....1890 Sodium salt of sulphonaphthalene-azo-salicylic acid. $\text{C}_{10}\text{H}_6\left\{\begin{array}{l} \text{SO}_2\text{Na} \\ \text{N}=\text{N}[4]\text{C}_6\text{H}_3\left\{\begin{array}{l} [1]\text{OH} \\ [2]\text{CO}_2\text{Na} \end{array}\right. \end{array}\right.$ Isomers of 2-naphthylamine-6-sulphonic acid, and cresotinic acid, instead of salicylic acid, are employed in the manufacture.		85,003	11,280

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
177	MORDANT YELLOW—Continued. Chrome Fast Yellow R..... Chrome Fast Yellow 2 R extra..... Mordant Yellow GD powder..... Mordant Yellow GS powder..... Mordant Yellow R..... Mordant Yellow R powder..... Chrome Yellow extra..... Chrome Yellow D..... Chrome Yellow DF..... Chrome Yellow R..... Milling Yellow 3 GO.....	A A B B B B By By By By By CV		
177a	ANTHRACENE YELLOW (V. M.) Anthracene Yellow BB 410. (Current marks, BN, C, GG, R, RN.) Anthracene Yellow MM 420..... Anthracene Yellow OO 422..... Anthracene Yellow 36 R (S.; R. 67).....	C C C C C	16,050	\$3,011
177b	SALICINE YELLOW (V. M.) Salicine Yellow 2503 (S.; Kal. 1908, 1909, 1914; S. H. IV, 1460). (Current marks, A, D, G, 2 G, R, VL.) Salicine Yellow 2504..... Salicine Yellow 2505..... Salicine Yellow 2506..... Salicine Yellow 2507..... Salicine Yellow 2509.....	K K K K K K K	23,068	3,534
177c	MILLING YELLOW (V. M.) Milling Yellow H (S. H. IV, 1377). (Current mark, O.) Milling Yellow HG..... Milling Yellow H 3 G.....	M M M M	1,270	628
177d	CHROME FAST YELLOW BN.....	CG	1,653	
177e	CHROME YELLOW (V. M.) Chrome Yellow R..... Chrome Yellow 13828..... Chrome Yellow G..... Chrome Yellow GG.....	AW I S S	2,607	523
178	CRUMPSALL YELLOW.....1894 Sodium salt of disulphonaphthalene-azo-salicylic acid.	Lev	0	
179	LAKE BORDEAUX B.....1907 Action of diazotised 2-naphthylamine-1-sulphonic acid upon $\beta$ -oxynaphtholic acid (m. p. 216°).	M	0	
180	ERIOCHROME BLUE BLACK BC.....1904 Sodium salt of sulpho-oxy-naphthalene-azo- $\alpha$ -naphthol. $\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} [1]\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_4[1]\text{OH} \\ [2]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array} \right.$	G	43,880	
180a	ERIOCHROME BLUE BLACK G.....	G	13,120	
181	SALICINE BLACK U.....1903 Sodium or zinc salt of sulpho-oxy-naphthalene-azo- $\beta$ -naphthol. $\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} [1]\text{N}=\text{N}[1]\text{C}_{10}\text{H}_4[2]\text{OH} \\ [2]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array} \right.$ Palatine Chrome Black 6 BX..... Diamond Blue Black EB..... Salicine Black U 2853..... Salicine Black UL 2859..... Chrome Fast Black: PV/BL conc..... Chrome Fast Black PWRR.....	B By K K I I I	65,658	10,004
181a	ANTHRACENE BLUE BLACK 29 D 1283 (S.). (Current marks, BE, BG, C.).....	C	1,997	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
181b	SALICINE BLACK (V. M.)..... Salicine Black K (S.; Kal. 1905, 1908, 1910, 1911, 1913, 1914). (Current marks, A, T, B, CB, CK, D, DAT, DUT, FB, FE, PEV, PET, U, UL, ULT, ULTG, US, USG, UT, UTG.).. Salicine Black LR 64295..... Salicine Black S 2350..... Salicine Black 067..... Salicine Black 0635..... Salicine Black 0675..... Salicine Black 0678..... Salicine Black 2350 extra..... Salicine Black 2359 extra..... Salicine Black 2360.....	..... K K K K K K K K K K	177,203	\$26,945
181c	CHROME FAST BLACK..... Chrome Fast Black A..... Chrome Fast Black PON..... Chrome Fast Black 12172.....	..... CG CG CG	3,363	645
182	BRILLIANT SULPHON RED.....1899 Transformation of azo coloring matters, derived from the ac- tion of diazotised 1-amido-4-naphthol-sulphonic acid upon chloro-benzene-sulphonic acid, or the corresponding toluene compounds, into aliphyl-sulphamine colors. Brilliant Sulphon Red B..... Brilliant Sulphon Red 5 B (S.)..... Fast Sulphon Violet 4 R.....	..... S S S	4,371	4,289
183	ERIOCHROME BLACK T conc.....1904 Sodium salt of nitro-sulpho- $\beta$ -naphthol-azo- $\alpha$ -naphthol. $\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 1   \text{N}=\text{N}   2   \text{C}_{10}\text{H}_7   1   \text{OH} \\ 2   \text{OH} \\ 4   \text{SO}_3\text{Na} \\ 8   \text{NO}_2 \end{array} \right.$	G	129,550	
184	ERIOCHROME BLACK A.....1904 Sodium salt of nitro-sulpho- $\beta$ -naphthol-azo- $\beta$ -naphthol. $\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 1   \text{N}=\text{N}   1   \text{C}_{10}\text{H}_7   2   \text{OH} \\ 2   \text{OH} \\ 4   \text{SO}_3\text{Na} \\ 8   \text{NO}_2 \end{array} \right.$	G	96,570	
185	ANTHRACENE CHROME BLACK.....1897 Sodium salt of sulpho- $\beta$ -naphthol-azo- $\beta$ -naphthol (or of deriva- tives and homologues). $\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 2   \text{OH} \\ 3   \text{N}=\text{N}   1   \text{C}_{10}\text{H}_7   2   \text{OH} \\ 7   \text{SO}_3\text{Na} \end{array} \right.$ Anthracene Chrome Black 3 K 639. (Current marks, 5 B, F, FE, P, PF, PFB, PPC, PPN, PPS, PR.)..... Anthracene Chrome Black TTT 648..... Anthracene Chrome Black 35 Y 1453.....	..... C C C	51,577	7,869
186	LANACYL VIOLET 5 N 499 (S.; Kal. 1911). (Current marks, B, BF.).....1896 Sodium salt of disulpho-oxy-naphthalene-azo-ethyl- $\alpha$ -naph- thylamine.	C	3,623	
187	LANACYL BLUE.....1896 Sodium salt of disulpho-oxy-naphthalene-azo-amido-naphthol. $\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 8   \text{OH} \\ 6   \text{SO}_3\text{Na} \\ 3   \text{SO}_3\text{Na} \\ 1   \text{N}=\text{N}   1   \text{C}_{10}\text{H}_7   4   \text{NH.C}_2\text{H}_5 \end{array} \right.$ $\left\{ \begin{array}{l} 1   \text{OH} \\ 5   \text{NH}_2 \end{array} \right.$ Lanacyl Blue 5 O 500. (Current marks, BB, BN, R, RN.).... Lanacyl Blue 51 M 1841..... Lanacyl Blue 51M.....	..... C C C	4,290	956

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
188	SULPHON ACID BLUE R.....1897 Sodium salt of disulpho-oxy-naphthalene-azo-phenyl- $\alpha$ -naphthylamine-sulphonic acid. $\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} [1]\text{N}=\text{N}\cdot\text{C}_6\text{H}_5 \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \\ [8]\text{OH} \end{array} \right. \left\{ \begin{array}{l} [1]\text{H}\cdot\text{C}_6\text{H}_5 \\ [8]\text{SO}_2\text{Na} \end{array} \right.$ Sulphon Acid Blue R..... Sulphon Acid Blue R conc. 27669..... Toly Blue SR.....	By By M	45,038	\$11,372
189	SULPHON ACID BLUE B.....1897 Sodium salt of disulpho-oxy-naphthalene-azo-tolyl- $\alpha$ -naphthylamine-sulphonic acid. $\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} [1]\text{N}=\text{N}\cdot\text{C}_6\text{H}_5 \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \\ [8]\text{OH} \end{array} \right. \left\{ \begin{array}{l} [1]\text{NHC}_6\text{H}_4\cdot\text{CH}_3 \\ [8]\text{SO}_2\text{Na} \end{array} \right.$ Sulphon Acid Blue B..... Toly Blue SB.....	By M	25,112	2,312
189a	BRILLIANT CLOTH BLUE 1769 (S.; Kal. 1914). (Current marks, B, 2 B, G, III F, R.).....	K	448	
190	ALKALI BROWN.....1887 Sodium salt of primuline-azo-phenylene-diamine.	WD	0	
191	PYRAMINE YELLOW R.....1902 Sodium salt of primuline-azo-nitro-m-phenylene-diamine. $\text{P}-\text{N}=\text{N}-\text{C}_6\text{H}_4 \left\{ \begin{array}{l} \text{NO}_2 \\ \text{NH}_2 \\ \text{NH}_2 \end{array} \right.$ (P=the radical of Primuline.)	B	5,727	
192	COTTON ORANGE G.....1993 Action of diazotised Primuline upon m-phenylene-diamine-disulphonic acid. Cotton Orange G..... Cotton Orange G.....	B S	1,877	239
193	STANLEY RED.....1887 Ammonium or sodium salt of sulphobenzoyl-amido-thiocresol-azo- $\beta$ -naphthol. $\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [1]\text{N} \\ [2]\text{S} \end{array} \right. \text{C} [1] \text{C}_6\text{H}_4 \left\{ \begin{array}{l} \text{SO}_2\text{NH}_4 \\ [4]\text{N}=\text{N}-[1]\text{C}_6\text{H}_4[2]\text{OH} \end{array} \right.$ $\left\{ \begin{array}{l} [1]\text{CH}_3 \end{array} \right.$	ClCo	100	
194	THIAZINE RED R.....1993 Sodium salt of sulphobenzoyl-amido-thiocresol-azo- $\alpha$ -naphthol-sulphonic acid. $\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [1]\text{N} \\ [2]\text{S} \end{array} \right. \text{C} [1] \text{C}_6\text{H}_4 \left\{ \begin{array}{l} \text{SO}_2\text{Na} \\ [4]\text{N}=\text{N}[2]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [1]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array} \right. \end{array} \right.$ $\left\{ \begin{array}{l} [4]\text{CH}_3 \end{array} \right.$ Thiazine Red R (S.)..... Thiazine Red R extra conc.....	B B	3,977	1,247
195	ROSOPHENINE SG..... Sodium salt of primuline-azo-1-naphthol-4-sulphonic acid.	ClCo	0	
196	TITAN RED.....1890 Derived from dehydro-thio-p-toluidine-sulphonic acid. Titan Red (similar to Titan Pink)..... Titan Scarlet Y (similar to Titan Pink).....	H H	646	199
196a	SCARLET C.....	Q	240	49
197	THIAZINE RED G..... Sodium salt of primuline-azo- $\beta$ -naphthol-6-sulphonic acid. $\text{P}-\text{N}=\text{N}[1]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [2]\text{OH} \\ [6]\text{SO}_2\text{Na} \end{array} \right.$ (P=the radical of Primuline.)	B	4,861	



## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
198	<p>THIAZINE YELLOW ..... 1887</p> <p>Sodium salt of the diazo-amido compound of dehydrothiotoluidine-sulphonic acid, or of the mixed diazo-amido compound of dehydrothiotoluidine-sulphonic acid and Primuline.</p> $\text{C}_6\text{H}_5 \begin{Bmatrix} (4)\text{CH}_3 \\ (1)\text{N} \\ (2)\text{S} \end{Bmatrix} \text{C} \begin{Bmatrix} (4)\text{C}_6\text{H}_5 \\ (1)\text{N} \end{Bmatrix} \begin{Bmatrix} (\text{SO}_2\text{Na}) \\ \end{Bmatrix}$ $\text{C}_6\text{H}_5 \begin{Bmatrix} (2)\text{S} \\ (1)\text{N} \\ (4)\text{CH}_3 \end{Bmatrix} \text{C} \begin{Bmatrix} (4)\text{C}_6\text{H}_5 \\ (\text{NH}_2\text{N}) \\ (\text{SO}_2\text{Na}) \end{Bmatrix}$ <p>(From dehydrothiotoluidine-sulphonic acid alone.)</p> <p>Thiazine Yellow G ..... By  Thiazine Yellow G conc. 9681 ..... By  Thiazine Yellow GL (S.; Kal. 1907) ..... By  Thiazine Yellow 3 G ..... By  Oxy Diamine Yellow 24 B 1156. (Current marks, GG, NY, TZ.) ..... C  Oxy Diamine Yellow 40 N 1867 ..... C  Mimosa C ..... G  Mimosa 2 conc. .... G  Mimosa superline ..... G  Thiazol Yellow conc. .... S  Clayton Yellow 5 per cent. .... C/Co  Titan Yellow Y (S. H. IV, 1530) ..... H</p>		29, 879	\$2, 410
199	<p>COTTON YELLOW R ..... 1888</p> <p>Sodium salt of primuline-azo-salicylic acid.</p> $\text{P}-\text{N}-\text{N}-[4]\text{C}_6\text{H}_5 \begin{Bmatrix} (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{Bmatrix}$ <p>(P—the radical of Primuline, or of dehydro-thio-p-toluidine-sulphonic acid.)</p> <p>Cotton Yellow R ..... B  Alkali Yellow ..... AW  Alkali Yellow conc. .... AW  Oriol Yellow EC ..... G</p>		9, 206	2, 343
199a	ALKALI FAST YELLOW ..... WD		133	
199b	COTTON YELLOW ..... Q		4, 079	1, 331
200	<p>LAKE RED D ..... 1905</p> <p>Action of diazotised anthranilic acid upon <math>\beta</math>-naphthol.</p>	M	2, 438	
201	<p>PIGMENT SCARLET G ..... M</p> <p>Action of diazotised anthranilic acid upon <math>\beta</math>-naphthol-6-sulphonic acid.</p>		0	
202	<p>PALATINE CHROME RED B ..... 1902</p> <p>From the action of diazotised anthranilic acid upon <math>\beta</math>-naphthol-3,6-disulphonic acid.</p>	B	7, 374	
203	<p>YELLOW FAST-TO-SOAP ..... 1884</p> <p>Sodium salt of m-carboxy-benzene-azo-diphenylamine.</p>	P	0	
204	<p>DIAMOND YELLOW G ..... 1889</p> <p>Sodium salt of m-carboxy-benzene-azo-salicylic acid.</p>	By	0	
205	<p>DIPHENYL CHRYSOÏNE RR ..... 1899</p> <p>Diazotisation of the alkaline condensation-product of dinitro-dibenzyl-disulphonic acid and aniline, combination of the diazo compound with phenol, and ethylation.</p>	G	0	
206	<p>DIPHENYL CATECHINE ..... 1899</p> <p>Diazotisation of the alkaline condensation-product of dinitro-dibenzyl-disulphonic acid and aniline, and combination of the diazo compound with dimethyl-amidonaphthol-sulphonic acid <math>\gamma</math>.</p> <p>Diphenyl Catechine G (S) ..... G  Diphenyl Catechine G superline ..... G</p>		3, 043	2, 500
207	<p>DIPHENYL FAST BROWN GNC (S.; S. H. IV, 1799) ..... 1899</p> <p>Diazotisation of the alkaline condensation-product of dinitro-dibenzyl-disulphonic acid and aniline, and combination of the diazo compound with phenyl-amidonaphthol-sulphonic acid <math>\gamma</math>.</p>	G	992	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<p style="text-align: center;">B. DISAZO COLORS.</p> <p style="text-align: center;">1. Primary disazo colors.</p> <p style="text-align: center;">Type: <math>\left. \begin{matrix} R \\ R' \end{matrix} \right\} K</math></p> <p>(R and R' represent the same or different diazo compounds which act upon a third totally different compound.)</p>			
208	LEATHER BROWN.....1890 Hydrochloride of bi-p-amidobenzene-disazo-m-phenylene-diamine.  $\begin{matrix} C_6H_4 \left\{ \begin{matrix} (4)NH_2 \\ (1)N=N \\ (1)N=N \end{matrix} \right\} C_6H_4 \left\{ \begin{matrix} (1)NH_2HCl \\ (3)NH_2 \end{matrix} \right\} \\ C_6H_4 \left\{ \begin{matrix} (4)NH_2 \\ (1)N=N \\ (1)N=N \end{matrix} \right\} \end{matrix}$	GrE	500	
209	TERRA COTTA FC.....1890 Sodium salt of primuline-azo-m-phenylene-diamine-azo-naphthalene-4-sulphonic acid.  $C_{10}H_6(SO_2Na) - \begin{matrix} P-N=N \\ N=N \end{matrix} - C_6H_4(NH_2)_2$ (P= residue of Primuline or dehydrothiotoluidine-sulphonic acid.)	G	551	
210	COTTON ORANGE R.....1893 Sodium salt of primuline-azo-disulpho-m-phenylene-diamine-azo-benzene-m-sulphonic acid.  $C_6H_4 \left\{ \begin{matrix} (1)N=N \\ (3)SO_2Na \end{matrix} \right\} \begin{matrix} P-N=N \\ N=N \end{matrix} C_6(NH_2)_2(SO_2Na)_2$ (P= the radical of Primuline.)	B	9,997	
210a	COTTON ORANGE (V. M.)..... Cotton Orange 173 A..... Cotton Orange 193.....	Lev Lev	1,200	393
210b	COTTON ORANGE BROWN (V. M.)..... Cotton Orange Brown 21 A..... Cotton Orange Brown 175.....	Lev Lev	4,543	379
210c	COTTON ORANGE.....	Q	720	131
211	RESORCIN BROWN.....1881 Sodium salt of xylene-azo-resorcin-azo-benzene-p-sulphonic acid.  $C_6H_3 \left\{ \begin{matrix} (CH_3)_2 \\ N=N-[2]C_6H_3 \left\{ \begin{matrix} (1)OH \\ (3)OH \\ (4)N=N-[1]C_6H_4(4)SO_2Na \end{matrix} \right\} \end{matrix} \right.$  Resorcin Brown..... Resorcin Brown 9974..... Resorcin Brown 1902..... Resorcin Brown 6329..... Resorcin Brown 9740..... Resorcin Brown..... Resorcin Brown..... Resorcin Brown QV..... Resorcin Brown.....	A B K BK BK WD AW G H	12,180	2,540
212	ACID BROWN.....1882 Sodium salt of bi-sulphobenzene-disazo-α-naphthol.  $\begin{matrix} C_6H_4 \left\{ \begin{matrix} (4)SO_2Na \\ (1)N=N(2) \end{matrix} \right\} C_{10}H_6(1)OH \\ C_6H_4 \left\{ \begin{matrix} (1)N=N(4) \\ (4)SO_2Na \end{matrix} \right\} \end{matrix}$  Fast Brown G..... Acid Brown Y.....	A P	2,702	317

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
212a	ACID BROWN (V. M.)..... Acid Brown DC. (Current marks, G, B, 2 B, R.)..... Acid Brown R 805 (S.)..... Acid Brown SR..... Acid Brown RN 532..... Acid Brown V.....	K K K G I	14, 705	\$3, 235
213	FAST BROWN.....1881 Sodium salt of bi-sulphonaphthalene-disazo-resorcin. $\text{C}_{10}\text{H}_6\left\{\begin{array}{l} (4)\text{SO}_3\text{Na} \\ (1)\text{N}=\text{N}(2) \end{array}\right\}\text{C}_6\text{H}_3\left\{\begin{array}{l} (1)\text{OH} \\ (3)\text{OH} \end{array}\right\}$ $\text{C}_{10}\text{H}_6\left\{\begin{array}{l} (1)\text{N}=\text{N}(4) \\ (4)\text{SO}_3\text{Na} \end{array}\right\}$	By	3, 205	
214	FAST BROWN O.....1879 Sodium salt of bi-sulpho-xylene-disazo- $\alpha$ -naphthol. $\text{C}_6\text{H}_4(\text{CH}_3)_2(\text{SO}_3\text{Na})-\text{N}=\text{N}(2)\text{C}_{10}\text{H}_7(1)\text{OH}$ $\text{C}_6\text{H}_4(\text{CH}_3)_2(\text{SO}_3\text{Na})-\text{N}=\text{N}(4)\text{C}_{10}\text{H}_7(1)\text{OH}$	M	2, 900	
215	BLUE BLACK N.....1896 Sodium salt of p-nitro-benzene-azo-disulpho-amido-naphthol-azo-benzene. $\text{C}_6\text{H}_5\left\{\begin{array}{l} (4)\text{NO}_2 \\ (1)-\text{N}=\text{N}(2) \end{array}\right\}\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{NH}_2 \\ (4)\text{SO}_3\text{Na} \\ (6)\text{SO}_3\text{Na} \\ (8)\text{OH} \end{array}\right\}$ $\text{C}_6\text{H}_5-\text{N}=\text{N}(7)\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{NH}_2 \\ (4)\text{SO}_3\text{Na} \\ (6)\text{SO}_3\text{Na} \\ (8)\text{OH} \end{array}\right\}$	K	2, 653	
216	DOMINGO BLUE BLACK B.....1899 Sodium salt of p-nitro-benzene-azo-3,5-disulpho-1-amido-8-naphthol-azo-benzene.	L	0	
217	AGALMA BLACK 10 B.....1891 Sodium salt of p-nitro-benzene-azo-disulpho-amido-naphthol-azo-benzene. $\text{C}_6\text{H}_5\left\{\begin{array}{l} (4)\text{NO}_2 \\ (1)-\text{N}=\text{N}(2) \end{array}\right\}\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{NH}_2 \\ (8)\text{OH} \\ (3)\text{SO}_3\text{Na} \\ (6)\text{SO}_3\text{Na} \end{array}\right\}$ $\text{C}_6\text{H}_5-\text{N}=\text{N}(7)\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{NH}_2 \\ (8)\text{OH} \\ (3)\text{SO}_3\text{Na} \\ (6)\text{SO}_3\text{Na} \end{array}\right\}$ Agalma Black 10 BX..... Naphthol Blue Black M conc..... Naphthylamine Black 10 B extra..... Amido Black 10 B..... Wool Black GG..... Coomassie Blue Black.....	B By By M tM Lev	40, 763	7, 518
217a	AGALMA BLACK (V. M.)..... Agalma Black 201211 easily soluble..... Agalma Black 4 BX (S. 1908).....	B B	13, 465	2, 350
217b	AGALMA BLACK GREEN T.....	B	1, 971	
217c	NAPHTHOL BLUE BLACK (V. M.)..... Naphthol Blue Black 33 F. (Current marks A, 6, B 15 B, BN, FG, S, SB, S 2 B, S 3 B.)..... Naphthol Blue Black 17 H 987..... Naphthol Blue Black 49 H 1787..... Naphthol Blue Black 13 L 890..... Naphthol Blue Black U 92..... Naphthol Blue Black UU 516.....	C C C C C C	62, 964	2, 964
217d	NAPHTHYLAMINE BLACK (V. M.)..... Naphthylamine Black 4 AN (Kal. 1908).....1907 Naphthylamine Black 4 B (Kal. 1905).....1904 Naphthylamine Black 4 B conc..... Naphthylamine Black 4 BK (Kal. 1905).....1904 Naphthylamine Black 4 BK conc..... Naphthylamine Black 4 BN (Kal. 1907)..... Naphthylamine Black 6 BN (Kal. 1907)..... Naphthylamine Black CSB (Kal. 1911)..... Naphthylamine Black CSR conc. (Kal. 1911)..... Naphthylamine Black F (S.; Kal. 1912).....	By By By By By By By By By By	122, 581	12, 240

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
217e	ACID BLACK (V. M.)..... Acid Black 2034..... Acid Black 2195..... Acid Black M conc..... Acid Black 6 BA 125 per cent..... Acid Black..... Acid Black 4 BD conc..... Acid Black AO..... Acid Black D conc. 153 per cent..... Acid Black G conc..... Acid Black HA conc. 7 per cent..... Acid Black HAS conc. 8 per cent..... Acid Black H conc. (Kal. 1905)..... Acid Black SO conc. (Kal. 1905).....	K BK BK CG AW CG I I I I S S	47,489	\$7,547
217f	AMIDO BLACK (V. M.)..... Amido Black A 2 G (S.; Kal. 1911)..... Amido Black A 2 G conc..... Amido Black 4024.....	M M M M	105,005	10,003
217g	WOOL BLACK (V. M.)..... Wool Black 6 A conc..... Wool Black 6 A extra conc..... Wool Black 6 AN..... Wool Black 10 B extra conc. (Kal. 1904)..... Wool Black HN extra.....	tM tM tM tM tM	22,371	4,800
217h	ACID WOOL BLACK extra conc. 1021.....	Q	12,518	4,203
218	NIGROPHOR.....1896 Sodium salt of p-nitro-benzene-azo-5-sulpho-1-amido-8-naphthol-azo-2,5-dichloro-benzene.	B	0	
219	CHROME PATENT GREEN N.....1898 Sodium salt of 4,6-dinitro-1-oxy-benzene-azo-4,6-disulpho-1-amido-8-naphthol-azo-benzene.	K	0	
220	PALATINE BLACK.....1891 Sodium salt of p-sulpho-benzene-azo-4-sulpho-amido-naphthol-azo-naphthalene.  $\text{C}_6\text{H}_4\left\{\begin{array}{c} [4]\text{SO}_2\text{Na} \\ [1]\text{N}=\text{N}[2] \end{array}\right\}\text{C}_6\text{H}_4\left\{\begin{array}{c} [1]\text{NH}_2 \\ [8]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array}\right\}$ Wool Black 4 B..... Wool Black 4 BX..... Wool Black 4 BC..... Wool Black 4 BC strong 50 : 100..... Wool Black 4 BFL..... Wool Black 6 B..... Wool Black 6 BS..... Palatine Black 4 B..... Palatine Black 3 GX..... Palatine Black MZ..... Palatine Black SF..... Palatine Black SFM (S.).....	A A A A A A A A A B B B B B	148,203	15,100
220a	AMIDO ACID BLACK (V. M.)..... Amido Acid Black B (S.; Kal. 1905; S. H. IV, 2425)..... Amido Acid Black BS (S.)..... Amido Acid Black 4 B.....	A A A A	32,624	3,614
220b	WOOL BLACK (V. M.)..... Wool Black B..... Wool Black 2 B..... Wool Black G extra..... Wool Black GR.....1897 Wool Black GRF..... Wool Black 3 B..... Wool Black 3015..... Wool Black 3045..... Wool Black 4524..... Wool Black MX..... Wool Black 5468..... Wool Black 5883.....	A A A A A A A Lev Lev Lev Q Q Q	110,244	16,808

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
220c	WOOL JET BLACK..... Wool Jet Black 3 B (S.; S. H. IV, 853).....1897 Wool Jet Black 3 B (old type) (S.; S. H. IV, 853).....1897	A A	3,303	\$1,019
221	ANTHRACENE ACID BROWN G.....1896 From the action of diazotised sulphanilic acid, and diazotised p-nitraniline upon salicylic acid.	C	0	
222	JANUS YELLOW G.....1897 A basic diazo color.  §. Secondary diazo colors.  Type: R → K → K'.  (R is diazotised and reacts with K. The product is diazotised and reacts with K'.)	M	2,250	
223	SUDAN III.....1879 Benzene-azo-benzene-azo-β-naphthol.  $C_6H_5-N=N-C_6H_4-N=N-C_{10}H_7.OH\beta$  Sudan III..... Cerasine Red 56 G 1901. (Current marks, I, II, III, A, B.)..... Cerasine Red 56 H 1902..... Cerasine Red 56 I 1903.....	A C C C	1,047	178
223a	CERASINE DARK RED I and II.....	C	701	
223b	SCARLET 6 R Crystals.....	BK	661	
224	CLOTH RED G.....1893 Sodium salt of benzene-azo-benzene-azo-α-naphthol-1-sul- phonic acid.  $C_6H_5-N=N-C_6H_4-N=N-[2]C_{10}H_7\left\{\begin{smallmatrix} [1]OH \\ [4]SO_2Na \end{smallmatrix}\right.$	By	401	
225	CROCEINE AZ..... Action of diazotised amido-azo-benzene upon α-naphthol-3,6- disulphonic acid.	C	500	
226	CROCEINE B.....1884 Sodium salt of benzene-azo-benzene-azo-α-naphthol-disul- phonic acid.  $C_6H_5-N=N-C_6H_4-N=N-[2]C_{10}H_7\left\{\begin{smallmatrix} [1]OH \\ [4]SO_2Na \\ [5]SO_2Na \end{smallmatrix}\right.$	Sch	0	
227	BRILLIANT CROCEINE.....1882 Sodium salt of benzene-azo-benzene-azo-β-naphthol-disul- phonic acid.  $C_6H_5-N=N-C_6H_4-N=N-[1]C_{10}H_7\left\{\begin{smallmatrix} [2]OH \\ [3]SO_2Na \\ [5]SO_2Na \end{smallmatrix}\right.$  Ponceau BO extra..... Cotton Scarlet extra (S.; S. H. IV, 840)..... Cotton Scarlet NP extra..... Cotton Scarlet NPX extra..... Cotton Scarlet NPX..... Brilliant Croceine 3 B..... Brilliant Croceine 3 BA conc..... Brilliant Croceine 61 R 2101. (Current marks, B, 2 B, 3 B, 5 B, 6 B, 7 B, 9 B, 10 B, BOO, M, MOO, PA, R, ROO.)..... Brilliant Croceine 61 U 2104..... Brilliant Croceine NZ..... Brilliant Croceine MD.....	A B B B B By By C C M GrE	122,058	20,323
227a	COCCEINE ORANGE.....	P	390	
227b	COTTON SCARLET.....	Q	1,680	273

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
228	ERYTHRINE P.....1881 Sodium salt of benzene-azo-benzene-azo- $\beta$ -naphthol-3,6,8-tri- sulphonic acid. $\text{C}_6\text{H}_5-\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{N}=\text{N}-\text{C}_{10}\text{H}_7\left\{\begin{array}{l} \text{OH}^8 \\ (\text{SO}_2\text{Na})_3 \end{array}\right.$	B	2,820	
229	AZO ACID VIOLET.....1890 From the action of diazotised amido-azo-benzene (and similar compounds) upon 1,8-dioxy-naphthalene-4-sulphonic acid (or upon 1,8-dioxy-naphthalene-disulphonic acid). Azo Acid Violet A 2 B..... Azo Acid Violet AL.....	By By	150	540
230	CLOTH RED 3 GA.....1888 Sodium salt of toluene-azo-toluene-azo- $\beta$ -naphthylamine-sul- phonic acid. $\text{C}_6\text{H}_5\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-\text{C}_6\text{H}_4\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-[\text{I}]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [2]\text{NH}_2 \\ [6]\text{SO}_2\text{Na} \end{array}\right\} \end{array}\right\} \end{array}\right.$	A	251	
231	CLOTH RED 3 B extra.....1886 Sodium salt of toluene-azo-toluene-azo-ethyl- $\beta$ -naphthylamine- 7-sulphonic acid. $\text{C}_6\text{H}_5\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-\text{C}_6\text{H}_4\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-[\text{I}]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [2]\text{NH}(\text{C}_2\text{H}_5) \\ [7]\text{SO}_2\text{Na} \end{array}\right\} \end{array}\right\} \end{array}\right.$	By	15	
232	SUDAN IV..... Toluene-azo-toluene-azo- $\beta$ -naphthol. $\text{C}_6\text{H}_5\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-\text{C}_6\text{H}_4\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-[\text{I}]\text{C}_{10}\text{H}_7[2]\text{OH} \end{array}\right\} \end{array}\right.$	A	51	
233	CLOTH RED B.....1879 Sodium salt of toluene-azo-toluene-azo- $\alpha$ -naphthol-4-sulphonic acid. $\text{C}_6\text{H}_5\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-\text{C}_6\text{H}_4\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array}\right\} \end{array}\right\} \end{array}\right.$	By	900	
233a	CLOTH RED BC (S.; Kal. 1910).....	By	1,003	
234	CLOTH RED G.....1879 Sodium salt of toluene-azo-toluene-azo- $\beta$ -naphthol-6-sulphonic acid. $\text{C}_6\text{H}_5\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-\text{C}_6\text{H}_4\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-[\text{I}]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [2]\text{OH} \\ [6]\text{SO}_2\text{Na} \end{array}\right\} \end{array}\right\} \end{array}\right.$ Cloth Red GA..... Cloth Red GFL (S.).....1912 Cloth Red GL (S.; Kal. 1914).....1912 Cloth Red G extra.....	A A A By	554	122
235	CROCEINE 3 B.....1884 Sodium salt of toluene-azo-toluene-azo- $\alpha$ -naphthol-4,8-disul- phonic acid. $\text{C}_6\text{H}_5\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-\text{C}_6\text{H}_4\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{OH} \\ [4]\text{SO}_2\text{Na} \\ [8]\text{SO}_2\text{Na} \end{array}\right\} \end{array}\right\} \end{array}\right.$	Sch	0	
236	WOOL RED B.....1879 Sodium salt of toluene-azo-toluene-azo- $\beta$ -naphthol-3,6-disul- phonic acid. $\text{C}_6\text{H}_5\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-\text{C}_6\text{H}_4\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-[\text{I}]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [2]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{array}\right\} \end{array}\right\} \end{array}\right.$ Cloth Red BA..... Wool Red 57 M 993 (S.; S. H. IV, 1395). (Current marks, B, BG.) Cloth Red O..... Cloth Red B..... Cloth Red BO..... Cloth Red 2 B..... Cloth Red 2 B conc.....	A C M GrE GrE WD WD	12,245	1,042

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
236a	FAST BORDEAUX..... Fast Bordeaux B conc..... Fast Bordeaux G conc.....	BK BK	222	304
236b	WOOL RED C.....	S	165	
237	BORDEAUX BK.....1879 Sodium salt of xylene-azo-xylene-azo-β-naphthol-6-sulphonic acid.	By	0	
238	UNION FAST CLARET.....1879 Sodium salt of xylene-azo-xylene-azo-β-naphthol-3,6-disul- phonic acid.	Lev	0	
239	AZOTOL C.....1896 Action of diazotised amido-chrysokine upon β-naphthol.	C	0	
240	JANUS RED B.....1896 Chloride of trimethyl-amido-benzene-azo-m-toluene-azo-β- naphthol.	M	250	
	$\text{C}_6\text{H}_4\left\{\begin{smallmatrix} (3)\text{N}(\text{CH}_3)_2\text{Cl} \\ (1)\text{N}=\text{N}-\text{C}_6\text{H}_4\left\{\begin{smallmatrix} \text{CH}_3 \\ \text{N}=\text{N}-\text{C}_6\text{H}_4.\text{OH}\beta \end{smallmatrix}\right. \end{smallmatrix}\right.$			
241	NEUTRAL GRAY G.....1894 Action of diazotised benzene-azo-α-naphthylamine upon 2-amido-8-naphthol-6-sulphonic acid (G acid).	A	2,544	
242	SULPHON BLACK G.....1895 Action of diazotised benzene-azo-naphthylamine-sulphonic acid (Cleve's acid) upon 1,8-dioxy-naphthalene-4-sulphonic acid.	By	0	
243	COOMASSIE WOOL BLACK R.....1899 Sodium salt of amido benzene-azo-naphthalene-azo-β-naph- thol-6-sulphonic acid.	Lev	0	
244	COOMASSIE WOOL BLACK S.....1899 Sodium salt of amidobenzene-azo-naphthalene-azo-β-naph- thol-6,7-disulphonic acid.	Lev	0	
245	NYANZA BLACK B.....1892 Sodium salt of amidobenzene-azo-naphthalene-azo-7-amido-1- naphthol-3-sulphonic acid.	A	0	
246	CLOTH SCARLET G.....1878 Sodium salt of sulphobenzene-azo-benzene-azo-β-naphthol.	K	9	
	$\text{C}_6\text{H}_4\left\{\begin{smallmatrix} (4)\text{SO}_2\text{Na} \\ (1)\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_6[2]\text{OH} \end{smallmatrix}\right.$			
247	SCARLET.....1879 Sodium salt of sulphobenzene-azo-sulphobenzene-azo-β-naph- thol.	.....	36,596	4,226
	$\text{C}_6\text{H}_4\left\{\begin{smallmatrix} (4)\text{SO}_2\text{Na} \\ (1)\text{N}=\text{N}-\text{C}_6\text{H}_4\left\{\begin{smallmatrix} \text{SO}_2\text{Na} \\ \text{N}=\text{N}-[1]\text{C}_{10}\text{H}_6[2]\text{OH} \end{smallmatrix}\right. \end{smallmatrix}\right.$			
	Ponceau 3 RB extra..... Scarlet EC 59 R 2050. (Current marks, EC, FR, FS, MS, RBC). Scarlet 59 S 2051..... Scarlet 59 T 2052..... Scarlet 59 U 2053.....	A C C C C		
247a	PONCEAU S (S.; S. J. IV, 181).....	A	69	
247b	IMPERIAL SCARLET 3 B.....	By	2,776	
247c	SCARLET for silk S.....	P	99	
248	FAST SCARLET B.....1879 Sodium salt of sulphobenzene-azo-benzene-azo-β-naphthol-6- sulphonic acid.	K	1,755	
	$\text{C}_6\text{H}_4\left\{\begin{smallmatrix} (4)\text{SO}_2\text{Na} \\ (1)\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_6\left\{\begin{smallmatrix} (2)\text{OH} \\ (6)\text{SO}_2\text{Na} \end{smallmatrix}\right. \end{smallmatrix}\right.$			

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
249	CROCEINE SCARLET ..... 1881 Sodium salt of sulphobenzene-azo-benzene-azo- $\beta$ -naphthol-8-sulphonic acid. $\text{C}_6\text{H}_4\left\{\begin{array}{l} [4]\text{SO}_3\text{Na} \\ [1]\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{N}=\text{N}-[1]\text{C}_6\text{H}_3\left\{\begin{array}{l} [2]\text{OH} \\ [8]\text{SO}_3\text{Na} \end{array} \right. \end{array}\right.$ Ponceau 4 RB extra..... Erythrine RR..... Croceine Scarlet 3 B.....	A B By	2, 348	\$374
249a	CROCEINE SCARLET 10 B.....	By	7, 275	
250	MILLING ORANGE..... Sodium salt of sulphobenzene-azo-benzene-azo-salicylic acid. $\text{C}_6\text{H}_4\left\{\begin{array}{l} [4]\text{SO}_3\text{Na} \\ [1]\text{N}=\text{N}-\text{C}_6\text{H}_4-\text{N}=\text{N}-[1]\text{C}_6\text{H}_3\left\{\begin{array}{l} [4]\text{OH} \\ [3]\text{CO}_2\text{Na} \end{array} \right. \end{array}\right.$ Milling Orange JN conc..... Milling Orange 88.....	WD WD	4, 157	1, 375
250a	FULLING ORANGE 16700.....	I	220	
251	CROCEINE SCARLET O..... 1888 Sodium salt of sulphobenzene-azo-sulphobenzene-azo- $\beta$ -naphthol-8-sulphonic acid.	K	0	
252	CLOTH SCARLET R..... 1878 Sodium salt of sulphotoluene-azo-toluene-azo- $\beta$ -naphthol.	K	0	
253	ORSEILLINE BB..... 1883 Sodium salt of sulphotoluene-azo-toluene-azo- $\alpha$ -naphthol-4-sulphonic acid.	By	0	
254	BORDEAUX G..... 1879 Sodium salt of sulphotoluene-azo-toluene-azo- $\beta$ -naphthol-6-sulphonic acid.	By	0	
255	PONCEAU 6 RB..... 1881 Sodium salt of sulphotoluene-azo-toluene-azo- $\beta$ -naphthol-8-sulphonic acid. $\text{C}_6\text{H}_3\left\{\begin{array}{l} \text{CH}_3 \\ \text{SO}_3\text{Na} \end{array} \right. \text{N}=\text{N}-\text{C}_6\text{H}_4\left\{\begin{array}{l} \text{CH}_3 \\ \text{N}=\text{N}-[1]\text{C}_{10}\text{H}_6\left\{\begin{array}{l} [2]\text{OH} \\ [8]\text{SO}_3\text{Na} \end{array} \right. \end{array} \right.$ Ponceau 6 RB extra..... Erythrine 7 B..... Croceine Scarlet 7 B..... Croceine Scarlet 8 BL.....	A B By K	2, 379	762
256	SULPHON BLACK 3 B..... 1896 Action of diazotised m-sulphobenzene-azo- $\alpha$ -naphthylamine upon phenyl-1-naphthylamine-8-sulphonic acid.	By	0	
257	SULPHONCYANINE..... 1892 Action of diazotised m-sulphobenzene-azo- $\alpha$ -naphthylamine upon phenyl- and tolyl- $\alpha$ -naphthylamine-8-sulphonic acid. Sulphonycyanine G..... Sulphonycyanine GR extra..... Sulphonycyanine 5 R..... Sulphonycyanine 5 R extra..... Sulphonycyanine 5 R extra conc. 27670..... Sulphonycyanine 5 RT extra (Kal. 1913)..... Tolyl Blue 5 R extra.....	By By By By By By M	86, 911	14, 119
257a	SULPHONCYANINE (V. M.)..... Sulphonycyanine BB conc..... Sulphonycyanine GR extra..... Sulphonycyanine 5 R extra..... Sulphonycyanine SR extra.....	B B B B	47, 533	7, 959
257b	TOLYL BLUE (V. M.)..... Tolyl Blue ST (S.; Kal. 1912)..... Tolyl Blue 7656 new.....	M M	11, 250	2, 007



### V. AZO COLORING MATTERS—Continued

No.	Commercial and chemical names and formulas.	Manufacturer.	Importation.	
			Pounds.	Value.
258	NAPHTHALENE ACID BLACK 4 B.....1890 Action of diazotised m-sulphobenzene-azo- $\alpha$ -naphthylamine-6-(or-7)-sulphonic acid upon $\alpha$ -naphthylamine. $\text{NaSO}_2\text{C}_6\text{H}_4-\text{N}=\text{N}[\text{C}_6\text{H}_4]_2\left\{\begin{array}{l} \text{2N}=\text{N}[\text{C}_6\text{H}_4]_2\text{NH}_2 \\ \text{6SO}_2\text{Na} \end{array}\right\}$	By	7,804	
259	PONCEAU 10 RB extra.....1893 Action of diazotised sulphobenzene-azo-o-anisidine upon 2-naphthol-8-sulphonic acid.	A	201	
260	ERIOCHROME VERDON 8 conc. (Kal. 1914).....1907 Action of diazotised sulphobenzene-azo-m-amido-p-cresol upon $\beta$ -naphthol. $\text{NaSO}_2\text{C}_6\text{H}_4-\text{N}=\text{N}-\text{C}_7\text{H}_4(\text{OH})-\text{N}=\text{N}-\text{C}_6\text{H}_4[\text{C}_2\text{H}_4\text{OH}]$	G	202	
261	BUFFALO BLACK 10 B.....1899 Action of diazotised sulphobenzene-azo- $\alpha$ -naphthylamine upon 1-amido-2-naphthol-3,6-disulphonic acid.	Seb	0	
262	VICTORIA BLACK.....1889 Sodium salt of sulphobenzene-azo-naphthalene-azo-dioxy-naphthalene-sulphonic acid. $\text{C}_6\text{H}_4\left\{\begin{array}{l} [4]\text{SO}_2\text{Na} \\ [1]\text{N}=\text{N}[\text{C}_6\text{H}_4]_2\text{N}=\text{N}[\text{C}_6\text{H}_4]_2\left\{\begin{array}{l} [1]\text{OH} \\ [8]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array}\right\} \end{array}\right\}$ Victoria Black B..... New Victoria Black B.....	By By	587	\$113
263	JET BLACK R.....1888 Sodium salt of disulphobenzene-azo- $\alpha$ -naphthalene-1-azo-phenyl-4-naphthylamine.	By	0	
264	FAST SULPHON BLACK F.....1903 Action of diazotised 4-sulphonaphthalene-azo-1-amido-8-naphthol-3,6-disulphonic acid upon $\beta$ -naphthol.	S	0	
265	SULPHONCYANINE BLACK.....1902 Action of diazotised 5-sulphonaphthalene-azo- $\alpha$ -naphthylamine upon phenyl-1-naphthylamine-8-sulphonic acid. Sulphocyanine Black B..... Sulphocyanine Black 2 B..... Tolyl Black B conc..... Tolyl Black BB..... Tolyl Black BG conc. (Kal. 1911).....	By By M M M	63,551	6,768
265a	SULPHONCYANINE BLACK (V. M.)..... Sulphocyanine Black BB..... Sulphocyanine Black GR extra.....	B B	6,089	915
266	NAPHTHYLAMINE BLACK.....1888 Sodium salt of 3,6-disulphonaphthalene-azo- $\alpha$ -naphthalene-azo- $\alpha$ -naphthylamine. $\text{C}_6\text{H}_4\left\{\begin{array}{l} [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{array}\right\}[\text{N}=\text{N}-(4)\text{C}_6\text{H}_4]_2[\text{N}=\text{N}-(1)\text{C}_6\text{H}_4]_2\text{NH}_2$ Naphthylamine Black 16 A 955 (S.; S. H. IV, 1434). (Current marks, 4 B, 6 B, CR, D, ES 3 B, ES 5 B, ESN, R, S, SGG, T.)..... Naphthylamine Black 23 D 1133..... Naphthylamine Black EE 501..... Naphthylamine Black 31 K 1339..... Naphthylamine Black T 91..... Naphthylamine Black 44 T 1673..... Naphthylamine Black 4 X 569..... Coomassie Wool Black D.....	C C C C C C C C Lev	45,733	5,900
266a	NAPHTHYLAMINE BLACK (V. M.)..... Naphthylamine Black 4 BX..... Naphthylamine Black SX..... Naphthylamine Black B 2 N..... Naphthylamine Black BOO..... Naphthylamine Black NA..... Naphthylamine Black NSBN..... Naphthylamine Black 2002..... Naphthylamine Black 2003.....	B B K K K K K K K	106,403	15,914

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
267	ANTHRACITE BLACK K 83 (R. 54).....1889 Sodium salt of 4,7-disulphonaphthalene-azo- $\alpha$ -naphthalene-azo-diphenyl-m-phenylene diamine. $C_{16}H_8 \left\{ \begin{array}{l} [4]SO_2Na \\ [7]SO_2Na \\ [1]N=N[4]C_{10}H_4[1]N=N[1]C_6H_5 \left\{ \begin{array}{l} [2]NHC_6H_5 \\ [4]NHC_6H_5 \end{array} \right. \end{array} \right.$	C	99	
268	NAPHTHYL BLUE BLACK N.....1906 Action of diazotised 4,6(7)-sulphonaphthalene-azo- $\alpha$ -naphthylamine ethyl ether upon $\alpha$ -naphthylamine.	C	0	
269	ACID BLACK.....1885 Sodium salt of 4,6(7)-disulphonaphthalene-azo- $\alpha$ -naphthalene-azo- $\beta$ -naphthol-3,6-disulphonic acid. $C_{16}H_8 \left\{ \begin{array}{l} [1]N=N[4]C_{10}H_4[1]N=N[1]C_{10}H_6 \left\{ \begin{array}{l} [2]OH \\ [3]SO_2Na \\ [6]SO_2Na \end{array} \right. \\ [4]SO_2Na \\ [6]SO_2Na \end{array} \right.$		17,437	\$3,439
	Wool Black DW new.....	BK		
	Wool Black 9904.....	BK		
	Acid Black BR extra conc.....	tM		
	Acid Black BR extra.....	tM		
	Naphthol Black BR.....	tM		
	Naphthol Black BR extra fine powder.....	tM		
269a	NAPHTHOL BLACK (V.M.).....		33,502	13,634
	Naphthol Black A.....	K		
	Naphthol Black CR.....	K		
	Naphthol Black MB.....	K		
	Naphthol Black N.....	K		
	Naphthol Black TR.....	K		
	Naphthol Black greenish.....	K		
	Naphthol Black 054.....	K		
	Naphthol Black 2014.....	K		
	Naphthol Black 2027.....	K		
	Naphthol Black 2029.....	K		
269b	BLUE BLACK (V. M.).....		625	173
	Blue Black solid B (S. J. 4th ed., 198) (formula).....	M		
	Blue Black O (S.; S. H. IV, 881; S. J. 4th ed., 198) (formula).....	M		
269c	ACID BLACK (V. M.).....		18,225	2,336
	Acid Black BR extra conc. 261 SJD.....	G		
	Acid Black M.....	H		
	Acid Black M conc.....	H		
	Acid Black 32.....	H		
	Acid Black AS.....	Q		
	Acid Black EW.....	Q		
	Acid Black KB.....	Q		
269d	NAPHTHOL BLACK 2 B (S.; S. H. IV, 1437).....1901	By	723	
270	BRILLIANT CROCEINE 9 B.....1886 Sodium salt of 6,8-disulpho- $\beta$ -naphthalene-azo-benzene-azo- $\beta$ -naphthol-disulphonic acid.	C	0	
271	DIAMINE BLUE 6 G.....1889 Sodium salt of 6,8-disulpho- $\beta$ -naphthalene-azo-ethoxy- $\alpha$ -naphthalene-azo- $\beta$ -naphthol.	C	0	
272	BRILLIANT BLACK.....1885 Sodium salt of disulpho- $\beta$ -naphthalene-azo- $\alpha$ -naphthalene-azo- $\beta$ -naphthol-disulphonic acid. $C_{16}H_8 \left\{ \begin{array}{l} [8]SO_2Na \\ [6]SO_2Na \\ [2]N=N[4]C_{10}H_4[1]N=N[1]C_{10}H_6 \left\{ \begin{array}{l} [2]OH \\ [3]SO_2Na \\ [6]SO_2Na \end{array} \right. \end{array} \right.$		39,454	5,563
	Brilliant Black B.....	B		
	Brilliant Black 3 B.....	B		
	Brilliant Black G.....	B		
	Carbon Black 4 B.....	M		

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
272a	NAPHTHOL BLACK (V. M.)..... Naphthol Black 24 A 1155. (Current marks, B, BB, 3 B, 4 B, 6 B, 12 B, BDF, BGN, P, 4 R.)..... Naphthol Black C 75..... Naphthol Black 67 D 2242..... Naphthol Black C 79..... Naphthol Black D 76..... Naphthol Black 62 Y 1878..... Naphthol Black F 78..... Naphthol Black G 79..... Naphthol Black 3 B.....	..... C C C C C C C C CV	48,388	\$5,808
272b	WOOL BLACK (V. M.)..... Wool Black NP..... Wool Black SG..... Wool Black BB double..... Wool Black 4 B..... Wool Black 11714..... Wool Black NN.....	..... CG GrE AW AW I I	15,756	3,596
273	DIAMINOGEN BLUE.....1895 Sodium salt of 7-sulpho-1,4-naphthylamine-azo- $\alpha$ -naphthalene-azo-2-naphthol-6-sulphonic acid. $\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{NH}_2 \\ [4]\text{N}=\text{N}[2]\text{C}_{10}\text{H}_7[1]\text{N}=\text{N}-\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [2]\text{OH} \\ [6]\text{SO}_2\text{Na} \end{array}\right. \\ [7]\text{SO}_2\text{Na} \end{array}\right.$ Diaminogen Blue 16 E 959 (S.). (Current marks, BB, G, NA, NB, RA, 2 RA, 2 RN, 3 RN, 6 RN.)..... Diaminogen Blue 18 G 1011..... Diaminogen Blue 4 W 483..... Diaminogen Blue 4 X 484..... Diaminogen Blue 18 Y 1023.....	..... C C C C C C	8,308	1,754
274	DIAMINOGEN.....1893 Sodium salt of sulphoamido-naphthalene-azo-naphthalene-azo- $\beta$ -naphthol-6-sulphonic acid. $\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{NH}_2 \\ [6 \& 7]\text{SO}_2\text{Na} \\ [4]\text{N}=\text{N}[4]\text{C}_{10}\text{H}_7[1]\text{N}=\text{N}[1]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [2]\text{OH} \\ [6]\text{SO}_2\text{Na} \end{array}\right. \end{array}\right.$ Diaminogen 41 O 1593. (Current marks, B, BB, BR, BW, CCL, CF.)..... Diaminogen SS 514..... Diaminogen TT 515..... Diaminogen 54 X 1927.....	..... C C C C C	305,944	56,801
274a	DIAZO INDIGO BLUE (V. M.)..... Diao Indigo Blue BR (S.; S. H. IV, 1866).....1901 Diao Indigo Blue BR extra (S.; S. H. IV, 1866).....1901 Diao Indigo Blue 2 RL (S.; S. H. IV, 1866).....1904 Diao Indigo Blue 3 RL (S.; S. H. IV, 1866).....1904	..... By By By By	7,484	1,730
274b	ZAMBESI PURE BLUE 4 B (S.; Kal. 1903; S. H. IV, 1841, gives composition).....	A	301	
275	DIAMOND BLACK.....1890 Sodium salt of carboxy-phenol-azo- $\alpha$ -naphthalene-azo- $\alpha$ -naphthol-4-sulphonic acid. $\text{C}_6\text{H}_5\left\{\begin{array}{l} [1]\text{OH} \\ [2]\text{CO}_2\text{Na} \\ [4]\text{N}=\text{N}[4]\text{C}_{10}\text{H}_7[1]\text{N}=\text{N}[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array}\right. \end{array}\right.$ Diamond Black F..... Diamond Black F conc..... Diamond Black FB..... Diamond Black GAF..... Diamond Black GAF conc..... Diamond Black AF..... Diamond Black CV 24142..... Diamond Black EA..... Diamond Black ET..... Diamond Black F..... Diamond Black F conc..... Diamond Black FB.....	..... B B B B B By By By By By By By By	351,583	55,030

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
275	DIAMOND BLACK—Continued. Diamond Black GA..... Diamond Black GA conc..... Diamond Black GA 23747..... Diamond Black GA 27412..... Diamond Black GA 27414..... Diamond Black GA 2 B 23629..... Fast Mordant Black FH..... Chrome Deep Black A extra conc..... Chrome Deep Black G extra conc..... Chrome Deep Black G extra conc. (Kal. 1910).....	By By By By By By M tM tM tM		
275a	CHROME BLACK (V. M.)..... Chrome Black A 160 per cent..... Chrome Black extra conc..... Chrome Black DF extra..... Chrome Black FPP..... Chrome Black G..... New Chrome Black PK..... Chrome Black I 10 per cent..... Chrome Black M conc..... Chrome Black Z..... Chrome Black 57006 20 per cent..... Fast Chrome Black (Kal. 1914).....	CG WD AW AW AW CV H H H H H	72,521	\$12,616
275b	CHROME DEEP BLACK (V. M.)..... Chrome Deep Black A extra conc..... Chrome Deep Black G extra conc.....	G G	2,504	422
275c	CHROME FAST BLACK (V. M.)..... Chrome Fast Black B 220 per cent (S.; S. II. IV, 1504).....1897 Chrome Fast Black FW (S. 1906)..... Chrome Fast Black FW 200 per cent.....	I I I	35,999	10,522
276	DIAMOND GREEN.....1890 Sodium salt of carboxyphenol-azo- $\alpha$ -naphthalene-azo-dioxy- naphthalene-4-sulphonic acid. $\text{C}_6\text{H}_5 \begin{Bmatrix} [1]\text{OH} \\ [2]\text{CO}_2\text{Na} \\ [4]\text{N}=\text{N}[4]\text{C}_{10}\text{H}_4[1]\text{N}=\text{N}[2]\text{C}_{10}\text{H}_7 \end{Bmatrix} \begin{Bmatrix} [1]\text{OH} \\ [8]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{Bmatrix}$ Diamond Green B 23753..... Diamond Green 3 G..... Diamond Green 88..... Diamond Green special.....	By By By By	8,622	1,523
277	ANTHRACENE ACID BLACK.....1891 Sodium salt of carboxyphenol-azo-sulphonaphthalene-azo- $\beta$ - naphthol-3,6-disulphonic acid. $\text{C}_6\text{H}_5 \begin{Bmatrix} [1]\text{OH} \\ [2]\text{CO}_2\text{Na} \\ [4]\text{N}=\text{N}-\text{C}_{10}\text{H}_7 \end{Bmatrix} \begin{Bmatrix} [1]\text{N}=\text{N}[1]\text{C}_{10}\text{H}_4 \\ [8 \text{ or } 7]\text{SO}_2\text{Na} \end{Bmatrix} \begin{Bmatrix} [2]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{Bmatrix}$ Anthracene Acid Black 3 A. (Current marks, BRH, DSF, DSFB, DSN, LW, SA, SAS, SASN, SR, SRT, ST.)..... Anthracene Acid Black 3 A 522..... Anthracene Acid Black 20 T 1073.....	C C C	17,793	2,642
278	BIEBRICH PATENT BLACK.....1891 $\text{HSO}_3\text{C}_{10}\text{H}_6\text{N}=\text{N}\cdot\text{C}_{10}\text{H}_5(\text{SO}_3\text{H})\cdot\text{N}=\text{N}\cdot\text{C}_{10}\text{H}_4\text{NH}_2$ 3. Tertiary diazo colors. Type: $\begin{Bmatrix} \text{R}-\text{K} \\ \text{R}'-\text{K}' \end{Bmatrix}$ (R and R' represent the same or dissimilar diazo compounds joined with certain carbonyl and dicarbonyl derivatives.)	K	0	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
279	<b>BENZO FAST SCARLET.</b> .....1909 Sodium salts of bi-benzene- (or homologue) disazo-dioxy-naphthyl-urea-disulphonic acid. $\text{Ar}-\text{N}_2-\left\{ \begin{array}{l} (5)\text{OH} \\ (7)\text{SO}_2\text{Na} \\ (1)\text{NH} \end{array} \right\} \text{CO (or S)}$ $\text{Ar}-\text{N}_2-\left\{ \begin{array}{l} (1)\text{NH} \\ (7)\text{SO}_2\text{Na} \\ (5)\text{OH} \end{array} \right\}$ (Ar=phenyl, tolyl, xylyl, $\alpha$ - or $\beta$ -naphthyl, or $\text{C}_6\text{H}_4\cdot\text{N}_2\cdot\text{C}_6\text{H}_4\cdot$ ) Benzo Fast Scarlet 4 BS..... Benzo Fast Scarlet 5 BS..... Benzo Fast Scarlet 8 BS..... Benzo Fast Scarlet GS.....	By By By By	36,674	\$9,010
280	<b>AZIDINE FAST SCARLET GGS.</b> .....1909 Diazotisation of o-toluidine and double combination with sulpho-m-toluyene-diamine-dicarbonyl-dioxy-dinaphthyl-amine-disulphonic acid.	CJ	0	
281	<b>AZIDINE FAST SCARLET 4 BS.</b> .....1909 Diazotisation of equal molecules of o-toluidine and $\beta$ -naphthylamine, and combination with sulpho-m-toluyene-diamine-dicarbonyl-dioxy-naphthylamine-disulphonic acid.	CJ	0	
282	<b>AZIDINE FAST SCARLET 7 BS.</b> .....1909 Diazotisation of $\beta$ -naphthylamine (2 mol.), and combination with (1 mol.) sulpho-m-toluyene-diamine-dicarbonyl-dioxy-naphthylamine-disulphonic acid. <i>4. Disazo colors derived from diazines.</i>	CJ	0	
283	<b>BISMARCK BROWN.</b> .....1863 Hydrochloride of benzene-disazo-m-phenylene-diamine. $\text{C}_6\text{H}_4 \left\{ \begin{array}{l} (1)\text{N}=\text{N}-(1)\text{C}_6\text{H}_4 \left\{ \begin{array}{l} (2)\text{NH}_2\text{HCl} \\ (4)\text{NH}_2 \end{array} \right. \\ (3)\text{N}=\text{N}-(1)\text{C}_6\text{H}_4 \left\{ \begin{array}{l} (2)\text{NH}_2\text{HCl} \\ (4)\text{NH}_2 \end{array} \right. \end{array} \right.$ Bismarck Brown extra..... Bismarck Brown EL..... Golden Brown..... Vesuvine O..... Vesuvine OOO extra..... Vesuvine PPL..... Vesuvine S..... Bismarck Brown L 19. (Current mar. s, LE, FF, GG, PS, YS.)..... Bismarck Brown M 20..... Bismarck Brown YS..... Bismarck Brown G..... Bismarck Brown 1568..... Bismarck Brown..... Brown Y 125 per cent..... Brown 37104.....	A A A B B B B C C tm I CV H H H	27,576	5,368
283a	<b>LEATHER BROWN (V. M.)</b> ..... Leather Brown R..... Leather Brown LX.....	I Lev	6,244	1,056
283b	<b>BROWN 359</b> .....	Lev	990	
284	<b>BISMARCK BROWN 2 R.</b> .....1878 Hydrochloride of toluene-disazo-m-toluyene-diamine. $\text{C}_6\text{H}_4 \left\{ \begin{array}{l} (3)\text{N}=\text{N}-(1)\text{C}_6\text{H}_4 \left\{ \begin{array}{l} (2)\text{NH}_2\text{HCl} \\ (4)\text{NH}_2 \end{array} \right. \\ (4)\text{CH}_3 \left\{ \begin{array}{l} (5)\text{CH}_3 \\ (2)\text{NH}_2\text{HCl} \end{array} \right. \\ (1)\text{N}=\text{N}-(1)\text{C}_6\text{H}_4 \left\{ \begin{array}{l} (4)\text{NH}_2 \\ (5)\text{CH}_3 \end{array} \right. \end{array} \right.$ Vesuvine B conc..... Vesuvine BL 11.....	B B	170,882	31,241

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
284	BISMARCK BROWN 2 R—Continued. Vesuvine BLR 2..... Vesuvine BPX..... Bismarck Brown 2 R extra conc..... Bismarck Brown 2 RV extra conc..... Bismarck Brown R 8 per cent..... Bismarck Brown R conc. 120 per cent..... Bismarck Brown R conc.....	B B tM tM I I CV		
284a	XL BROWN RH.....	H	251	
285	TOLUYLENE BROWN G.....1890 Sodium salt of sulphotoluene-disazo-m-phenylene-diamine.	GrE	0	
286	TOLUYLENE YELLOW OO.....1894 Sodium salt of sulphotoluene-disazo-bi-nitro-m-phenylene-diamine. $\text{C}_6\text{H}_7 \begin{Bmatrix} \text{[1]N=N[4]C}_6\text{H}_5 \\ \text{[2]CH}_3 \\ \text{[5]SO}_2\text{Na} \\ \text{[3]N=N[4]C}_6\text{H}_5 \end{Bmatrix} \begin{Bmatrix} \text{[1]NH}_2 \\ \text{[3]NH}_2 \\ \text{[6]NO}_2 \\ \text{[6]NO}_2 \\ \text{[3]NH}_2 \\ \text{[1]NH}_2 \end{Bmatrix}$	GrE	5,485	
287	TOLUYLENE ORANGE R.....1891 Sodium salt of sulphotoluene-disazo-bi-β-naphthylamine. $\text{C}_6\text{H}_7 \begin{Bmatrix} \text{[1]N=N[1]C}_{10}\text{H}_7\text{[2]NH}_2 \\ \text{[2]CH}_3 \\ \text{[5]SO}_2\text{Na} \\ \text{[3]N=N[1]C}_{10}\text{H}_7\text{[2]NH}_2 \end{Bmatrix}$	M	500	
288	PALATINE CHROME BLACK.....1901 From tetrazotised 2,6-diamido-phenol-4-sulphonic acid and β-naphthol (2 mols.). Palatine Chrome Black F powder..... Palatine Chrome Black paste..... $\text{HSO}_3\text{C}_6\text{H}_4(\text{OH})(\text{N}_2\text{C}_{10}\text{H}_7\text{OH})_2$	B B	18,985	\$1,007
288a	ACID ALIZARIN BLACK SR.....	CV	200	
289	PALATINE CHROME BLACK S.....1904 From tetrazotised 2,6-diamido-1-phenol-4-sulphonic acid combined with β-naphthol (1 mol.) and 2-naphthol-6-sulphonic acid.	B	0	
290	VIOLET BLACK.....1887 Sodium salt of benzene-disazo-α-naphthylamine-α-naphthol-sulphonic acid.	B	0	
291	AZO ALIZARIN BORDEAUX W.....1899 Sodium salt of benzene-disazo-salicylic acid-α-naphthol-sulphonic acid.	DH	0	
292	AZO ALIZARIN BLACK I.....1888 Sodium salt of benzene-disazo-salicylic acid-dioxy-naphthalene-di- (or mono-) sulphonic acid.	DH	0	
293	MILLING RED.....1893 From tetrazotised thio-aniline combined with β-naphthol-6-sulphonic acid (2 mols.). Milling Red 57 D 1884. (Current marks, FGG, FR, G, R.)..... Milling Red 57 E 1885.....	C C	699	139
294	FAST MORDANT YELLOW.....1892 Sodium salt of thio-di-benzene-disazo-di-salicylic acid. $\text{S} \begin{Bmatrix} \text{C}_6\text{H}_4 \cdot \text{N}_2 \cdot \text{C}_6\text{H}_5 \begin{Bmatrix} \text{[1]OH} \\ \text{[2]CO}_2\text{Na} \end{Bmatrix} \\ \text{C}_6\text{H}_4 \cdot \text{N}_2 \cdot \text{C}_6\text{H}_5 \begin{Bmatrix} \text{[1]OH} \\ \text{[2]CO}_2\text{Na} \end{Bmatrix} \end{Bmatrix}$ Anthracene Yellow C..... Fast Mordant Yellow G powder (S.)..... Acid Alizarin Yellow GGW..... Anthracene Yellow C 4464.....	By B M BK	3,678	5,796

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
295	DIPHENYL FAST BLACK superfine.....1896 Sodium salt of ditolylamine-diazo-m-tolylene-diamine- amido-naphthol-sulphonic acid. $\text{HN} - \begin{cases} \text{C}_6\text{H}_4(\text{CH}_3) - \text{N}_2 - (2)\text{C}_6\text{H}_4 \begin{cases} (1)\text{OH} \\ (2)\text{SO}_2\text{Na} \end{cases} \\ \text{C}_6\text{H}_4(\text{CH}_3) - \text{N}_2 - (4)\text{C}_6\text{H}_4 \begin{cases} (7)\text{NH}_2 \\ (1)\text{NH}_2 \\ (3)\text{NH}_2 \\ (6)\text{CH}_3 \end{cases} \end{cases}$	G	582	
296	COTTON YELLOW.....1898 Sodium salt of diphenyl-urea-diazo-bi-salicylic acid. $\text{OC} - \begin{cases} \text{NH.C}_6\text{H}_4 - \text{N} = \text{N} - \text{C}_6\text{H}_4 \begin{cases} (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{cases} \\ \text{NH.C}_6\text{H}_4 - \text{N} = \text{N} - \text{C}_6\text{H}_4 \begin{cases} (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{cases} \end{cases}$ Cotton Yellow GI..... Cotton Yellow GX..... Benzo Fast Yellow 5 GL.....	B B By	21,437	\$6,161
296a	BENZO FAST YELLOW (V. M.)..... Benzo Fast Yellow 4 GL extra..... Benzo Fast Yellow RL..... Benzo Fast Yellow RL 28168.....	By By By By	6,535	2,753
296b	COTTON YELLOW CH conc. 250 per cent (S.).....	I	3,500	
297	BENZO FAST PINK 2 BL.....1900 Sodium salt of diphenyl-urea-disulphonic-acid-diazo-bi- amido-naphthol-sulphonic acid. $\text{OC} \begin{cases} (1) \begin{cases} \text{C}_6\text{H}_4 \begin{cases} (3)\text{SO}_2\text{Na} \\ (4) - \text{N}_2 - \text{C}_{10}\text{H}_7 \begin{cases} (2)\text{NH}_2 \\ (8)\text{OH} \\ (6)\text{SO}_2\text{Na} \end{cases} \end{cases} \\ \text{C}_6\text{H}_4 \begin{cases} (4) - \text{N}_2 - \text{C}_{10}\text{H}_7 \begin{cases} (2)\text{NH}_2 \\ (8)\text{OH} \\ (6)\text{SO}_2\text{Na} \end{cases} \end{cases} \end{cases} \end{cases}$	By	3,252	
298	MILLING RED R..... Tetrazotised diamido-diphenyl-methane combined with $\beta$ - naphthol-3,6-disulphonic acid (2 mols.).	WD	0	
299	CINNABAR SCARLET BF..... Tetrazotised diamido-dixylyl-methane combined with $\beta$ - naphthol-3,6-disulphonic acid (2 mols.).	BK	0	
300	CINNABAR SCARLET G.....1887 Tetrazotised diamido-dixylyl-phenyl-methane combined with $\beta$ -naphthol-3,6-disulphonic acid (2 mols.).	BK	0	
301	HESSIAN PURPLE N.....1896 Sodium salt of disulpho-stilbene-diazo-bi- $\beta$ -naphthylamine. $\begin{array}{c} \text{CH} - (1)\text{C}_6\text{H}_4 \begin{cases} (2)\text{SO}_2\text{Na} \\ (4)\text{N} = \text{N} - (1)\text{C}_{10}\text{H}_7 \begin{cases} (2)\text{NH}_2 \\ (8)\text{OH} \\ (6)\text{SO}_2\text{Na} \end{cases} \end{cases} \\   \\ \text{CH} - (1)\text{C}_6\text{H}_4 \begin{cases} (2)\text{SO}_2\text{Na} \\ (4)\text{N} = \text{N} - (1)\text{C}_{10}\text{H}_7 \begin{cases} (2)\text{NH}_2 \\ (8)\text{OH} \\ (6)\text{SO}_2\text{Na} \end{cases} \end{cases} \end{array}$	By	465	
302	BRIGHT HESSIAN PURPLE.....1896 Sodium salt of disulpho-stilbene-diazo-bi- $\beta$ -naphthylamine- 6-sulphonic acid.	L	0	
303	RENOL BRIGHT YELLOW.....1886 Sodium salt of disulpho-stilbene-diazo-bi-phenol. $\begin{array}{c} \text{CH} (1)\text{C}_6\text{H}_4 \begin{cases} (2)\text{SO}_2\text{Na} \\ (4)\text{N} = \text{N} (1)\text{C}_6\text{H}_4 \begin{cases} (4)\text{OH} \\ (2)\text{SO}_2\text{Na} \end{cases} \end{cases} \\   \\ \text{CH} (1)\text{C}_6\text{H}_4 \begin{cases} (2)\text{SO}_2\text{Na} \\ (4)\text{N} = \text{N} (1)\text{C}_6\text{H}_4 \begin{cases} (4)\text{OH} \\ (2)\text{SO}_2\text{Na} \end{cases} \end{cases} \end{array}$ Paper Yellow 3 GX..... Renol Brilliant Yellow.....	B TM	12,756	3,890

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
303a	PAPER YELLOW (V. M.)..... Paper Yellow G..... Paper Yellow GGX..... Paper Yellow RRX..... Paper Yellow S RXX..... Paper Yellow 22812..... Paper Yellow..... Paper Yellow 33598 cryst..... Paper Yellow 03995.....	B B B B B WD S S	264,443	\$45,220
303b	BRILLIANT YELLOW.....	Q	331	36
304	CHRYSO PHENINE.....1886 Sodium salt of disulpho-stilbene-diazo-phenetol.  $\begin{array}{l} \text{CH}-[\text{I}]\text{C}_6\text{H}_4\left\{\begin{array}{l} [2]\text{SO}_2\text{Na} \\ [4]\text{N}=\text{N}-[4]\text{C}_6\text{H}_4[1]\text{OC}_2\text{H}_5 \\ [4]\text{N}=\text{N}-[4]\text{C}_6\text{H}_4[1]\text{OC}_2\text{H}_5 \\ [2]\text{SO}_2\text{Na} \end{array}\right. \\ \text{CH}-[\text{I}]\text{C}_6\text{H}_4\left\{\begin{array}{l} [2]\text{SO}_2\text{Na} \\ [4]\text{N}=\text{N}-[4]\text{C}_6\text{H}_4[1]\text{OC}_2\text{H}_5 \\ [4]\text{N}=\text{N}-[4]\text{C}_6\text{H}_4[1]\text{OC}_2\text{H}_5 \\ [2]\text{SO}_2\text{Na} \end{array}\right. \end{array}$ Chrysophenine G extra strong..... Pyramine Yellow GXS..... Pyramine Yellow GXSC 17913..... Pyramine Yellow GXSP 17913..... Chrysophenine G..... Chrysophenine G conc. 24278..... Chrysophenine 81572. (Current mark, G.)..... Chrysophenine 190..... Azidine Yellow CP conc..... Triazol Yellow NBPOO..... Chrysophenine GOO..... Chrysophenine G extra conc..... Chrysophenine G..... Chrysophenine III..... Chrysophenine double..... Chrysophenine conc..... Sultan Yellow H..... Sultan Yellow H 20 per cent.....	A B B B By By K K K CJ GrE L tM AW AW I S H H	125,293	\$7,444
304a	CHRYSO PHENINE (V. M.)..... Chrysophenine R (S.; Kal. 1905)..... Chrysophenine W extra conc.....	By By	12,112	2,022
304b	DIRECT YELLOW (V. M.)..... Direct Yellow G extra..... Direct Yellow G extra..... Direct Yellow CR 5 per cent (S.)..... Direct Yellow 19305..... Fast Direct Yellow 22090.....	L L I I S	5,536	1,536
304c	CHRYSOBARINE (V. M.)..... Chrysobarine powder new extra conc..... Chrysobarine R conc. powder.....	tM tM	2,495	441
304d	SULTAN ORANGE DS 25 per cent.....	H	1,022	
305	HESSIAN YELLOW.....1886 Sodium salt of disulpho-stilbene-diazo-bi-salicylic acid.	L	0	
306	PYRAMINE ORANGE 3 G.....1898 Sodium salt of diphenyl-diazo-nitro-m-phenylene-diamine-m-phenylene-diamine-disulphonic acid.  $\begin{array}{l} \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_6\text{H}_4\left\{\begin{array}{l} [1]\text{NH}_2 \\ [3]\text{NH}_2 \\ [6]\text{NO}_2 \end{array}\right. \\ [1] \left\{\begin{array}{l} [1]\text{NH}_2 \\ [3]\text{NH}_2 \\ [4]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{array}\right. \\ \text{C}_6\text{H}_4[4]-\text{N}_2-[2]\text{C}_6\text{H}_4\left\{\begin{array}{l} [1]\text{NH}_2 \\ [3]\text{NH}_2 \\ [4]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{array}\right. \end{array}$	G	7,963	
307	CONGO.....1884 Sodium salt of diphenyl-diazo-binaphthionic acid.  $\begin{array}{l} \text{C}_{10}\text{H}_6[4]-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_6\left\{\begin{array}{l} [1]\text{NH}_2 \\ [4]\text{SO}_2\text{Na} \\ [4]\text{SO}_2\text{Na} \\ [1]\text{NH}_2 \end{array}\right. \\ [1] \left\{\begin{array}{l} [1]\text{NH}_2 \\ [4]\text{SO}_2\text{Na} \\ [4]\text{SO}_2\text{Na} \\ [1]\text{NH}_2 \end{array}\right. \\ \text{C}_{10}\text{H}_6[4]-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_6\left\{\begin{array}{l} [1]\text{NH}_2 \\ [4]\text{SO}_2\text{Na} \\ [4]\text{SO}_2\text{Na} \\ [1]\text{NH}_2 \end{array}\right. \end{array}$		12,040	1,667



## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
307	CONGO—Continued. Congo..... Congo Red..... Cotton Red 4 B 025..... Cotton Red extra conc.....	A GrE GrE tM		
307a	COTTON RED (V. M.)..... Cotton Red A..... Cotton Red 8 BN..... Cotton Red 65 A..... Cotton Red 201 A.....	C CG Lev Lev	4,455	\$301
307b	DIRECT RED (V. M.)..... Direct Red B..... Direct Red..... Direct Red 215..... Direct Red 1725..... Direct Red..... Direct Red 3 B.....	DH I I I I S S	4,124	1,206
308	DIAZO BLACK.....1892 Sodium salt of diphenyl-diazo-bi-5-sulpho- $\alpha$ -naphthylamine.  $\begin{array}{c} \text{C}_6\text{H}_4(4)-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{NH}_2 \\ (5)\text{SO}_2\text{Na} \end{array}\right. \\ (1) \left\{ \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{NH}_2 \\ (5)\text{SO}_2\text{Na} \end{array}\right. \end{array} \right. \end{array}$ Diazo Black OB (S.; Kal. 1911)..... Diazo Black OT..... Diazo Black OT conc. 25928..... Diazo Black R..... Diazo Black 10020.....	By By By By BK	62,354	\$,257
309	GLYCINE RED.....1891 Sodium salt of diphenyl-diazo- $\alpha$ -naphthyl-glycine-naphthionic acid.	KI	0	
310	GLYCINE CORINTH.....1891 Sodium salt of diphenyl-diazo-bi- $\alpha$ -naphthyl-glycine.	KI	0	
311	ORANGE TA.....1894 Sodium salt of diphenyl-diazo-cresol-naphthionic acid.  $\begin{array}{c} \text{C}_6\text{H}_4(4)-\text{N}=\text{N}-\text{C}_6\text{H}_3\left\{\begin{array}{l} \text{OH} \\ \text{CH}_3 \end{array}\right. \\ (1) \left\{ \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{NH}_2 \\ (5)\text{SO}_2\text{Na} \end{array}\right. \end{array} \right. \end{array}$	A	602	
312	CONGO CORINTH.....1896 Sodium salt of diphenyl-diazo-naphthionic- $\alpha$ -naphthol-4-sulphonic acid.  $\begin{array}{c} \text{C}_6\text{H}_4(4)-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{OH} \\ (4)\text{SO}_2\text{Na} \end{array}\right. \\ (1) \left\{ \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{NH}_2 \\ (5)\text{SO}_2\text{Na} \end{array}\right. \end{array} \right. \end{array}$ Congo Corinth G..... Congo Corinth G 99046..... Cotton Corinth G..... Congo Corinth G..... Cotton Corinth G..... Congo Corinth G.....	A A B By GrE S	30,743	\$,030
312a	AZO ORSEILLINE conc. (Hurst, Dict. of Coal Tar Colors, 39, formula, etc.; S. J., 2d ed., 159) (Benzidine+2 mol. $\alpha$ -naphthol-sulphonic acid N W).....	FA	4,400	
313	CONGO RUBINE.....1891 Sodium salt of diphenyl-diazo-naphthionic- $\beta$ -naphthol-8-sulphonic acid.  $\begin{array}{c} \text{C}_6\text{H}_4(4)-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{NH}_2 \\ (4)\text{SO}_2\text{Na} \end{array}\right. \\ (1) \left\{ \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (2)\text{OH} \\ (3)\text{SO}_2\text{Na} \end{array}\right. \end{array} \right. \end{array}$ Congo Rubine..... Cotton Rubine..... Congo Rubine..... Congo Rubine 8714..... Azidine Bordesaux G conc..... Congo Rubine G.....	A B By CG CJ S	46,112	\$,239

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
313a	COTTON RUBY 32 A.....	Lev	100	
314	PYRAMINE ORANGE RR.....1899 Sodium salt of diphenyl-disazo-nitro-m-phenylene-diamine- $\beta$ -naphthylamine-disulphonic acid. $[1] \left\{ \begin{array}{l} C_6H_4[4]-N_2-[1]C_6H_4 \left\{ \begin{array}{l} [2]NH_2 \\ [3]SO_2Na \\ [6]SO_2Na \end{array} \right. \\ C_6H_4[4]-N_2-[4]C_6H_4 \left\{ \begin{array}{l} [1]NH_2 \\ [3]NH_2 \\ [6]NO_2 \end{array} \right. \end{array} \right.$	B	2, 739	
315	CONGO ORANGE.....1889 Sodium salt of diphenyl-disazo-phenetol- $\beta$ -naphthylamine-di-sulphonic acid. $[1] \left\{ \begin{array}{l} C_6H_4[4]-N_2-[4]C_6H_4[1]OC_2H_5 \\ C_6H_4[4]-N_2-[1]C_6H_4 \left\{ \begin{array}{l} [2]NH_2 \\ [3]SO_2Na \\ [6]SO_2Na \end{array} \right. \end{array} \right.$ Congo Orange G..... Congo Orange G.....	A By	1, 623	\$450
316	BRILLIANT CONGO G.....1886 Sodium salt of diphenyl-disazo- $\beta$ -naphthylamine-6-sulphonic- $\beta$ -naphthylamine-3,6-disulphonic acid.	A	0	
317	PYRAMIDOL BROWN BG.....1898 Sodium salt of diphenyl-disazo-bi-resorcin.	FA	0	
318	BENZIDINE PUCE..... Sodium salt of diphenyl-disazo-bi- $\beta$ -naphthol.	M	0	
319	DIAMINE SCARLET.....1889 Sodium salt of diphenyl-disazo-phenetol- $\beta$ -naphthol-6,8-disulphonic acid. $[1] \left\{ \begin{array}{l} C_6H_4[4]-N=N-[1]C_6H_4[4]OC_2H_5 \\ C_6H_4[4]-N=N-[1]C_6H_4 \left\{ \begin{array}{l} [2]OH \\ [3]SO_2Na \\ [8]SO_2Na \end{array} \right. \end{array} \right.$ Diamine Bordeaux 60 X 2081. (Current marks, B, BR, J, S, VRO.)..... Diamine Bordeaux 60 Z 2083..... Diamine Scarlet 58 E 2011. (Current marks, B, 3 B, HS, RG.)..... Diamine Scarlet 58 F 2012.....	C C C C	28, 887	9, 627
319a	DIAMINE BRILLIANT BORDEAUX R.....	C	12, 288	
320	BORDEAUX (V. M.).....1883 Sodium salt of diphenyl-disazo-bi- $\beta$ -naphthol-8-sulphonic acid. $[1] \left\{ \begin{array}{l} C_6H_4[4]-N=N-[1]C_6H_4 \left\{ \begin{array}{l} [2]OH \\ [3]SO_2Na \\ [8]SO_2Na \end{array} \right. \\ C_6H_4[4]-N=N-[1]C_6H_4 \left\{ \begin{array}{l} [3]SO_2Na \\ [2]OH \end{array} \right. \end{array} \right.$ Bordeaux COV..... Bordeaux BLA extra.....	A LM	1, 115	243
320a	BORDEAUX extra.....	G	230	
321	HELIOTROPE 2 B.....1892 Sodium salt of diphenyl-disazo- $\alpha$ -naphthol-3,8-disulphonic- $\beta$ -naphthol-8-sulphonic acid. $[1] \left\{ \begin{array}{l} C_6H_4[4]-N_2-[1]C_6H_4 \left\{ \begin{array}{l} [2]OH \\ [3]SO_2Na \\ [1]OH \\ [8]SO_2Na \end{array} \right. \\ C_6H_4[4]-N_2-[2]C_6H_4 \left\{ \begin{array}{l} [3]SO_2Na \\ [8]SO_2Na \end{array} \right. \end{array} \right.$ Heliotrope 2 B..... Heliotrope BB.....	A By	1, 473	214

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
322	TRISULPHON VIOLET B.....1896 Sodium salt of diphenyl-disazo- $\beta$ -naphthol- $\alpha$ -naphthol-trisulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}[3]\text{C}_6\text{H}_3 \begin{Bmatrix} (1)\text{OH} \\ (3)\text{SO}_2\text{Na} \\ (6)\text{SO}_2\text{Na} \\ (8)\text{SO}_2\text{Na} \end{Bmatrix} \\ [1] \left  \begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}[1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (1)\text{OH} \\ (2)\text{OH} \end{Bmatrix} \end{array} \right.$	S	1,124	
323	DIANIL BLUE R.....1890 Sodium salt of diphenyl-disazo-bi-1,8-dioxy-naphthalene-3,6-disulphonic acid.	M	0	
324	CHICAGO BLUE 4 R.....1894 Mixed disazo compounds from benzidine, amido-naphthol-sulphonic acid (1:8:4) or disulphonic acid (1:8:2:4), and $\alpha$ -naphthol-sulphonic acid. For instance— $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}_2-[7]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (1)\text{NH}_2 \\ (8)\text{OH} \\ (2)\text{SO}_2\text{Na} \\ (4)\text{SO}_2\text{Na} \end{Bmatrix} \\ [1] \left  \begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}_2-[2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (1)\text{OH} \\ (4)\text{SO}_2\text{Na} \end{Bmatrix} \end{array} \right.$	A	1,190	
325	COLUMBIA BLUE R.....1894 Sodium salt of diphenyl-disazo- $\alpha$ -naphthol-3,8-disulphonic-1-amido- $\beta$ -naphthol-4-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}[2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (1)\text{OH} \\ (3)\text{SO}_2\text{Na} \\ (6)\text{SO}_2\text{Na} \end{Bmatrix} \\ [1] \left  \begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}[7]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (1)\text{NH}_2 \\ (8)\text{OH} \\ (4)\text{SO}_2\text{Na} \end{Bmatrix} \end{array} \right.$	A	2,071	
326	OXY DIAMINE VIOLET.....1893 Sodium salt of diphenyl-disazo-bi-amido-naphthol-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}_2-[6]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (2)\text{NH}_2 \\ (5)\text{OH} \\ (7)\text{SO}_2\text{Na} \end{Bmatrix} \\ [1] \left  \begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}_2-[6]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (2)\text{NH}_2 \\ (5)\text{OH} \\ (7)\text{SO}_2\text{Na} \end{Bmatrix} \end{array} \right.$ Oxamine Violet..... Benzo Violet O..... Oxy Diamine Violet 36 Q 1470 (S.; S. H. IV, 1735-36). (Current marks, B, BF, G, R.)..... Oxy Diamine Violet 5 W 508..... Oxy Diamine Violet 5 Z 511..... Naphthamine Violet BE.....	B By C C C K	11,514	\$1,928
326a	BENZO VIOLET R (S.; S. H. IV, 1737).....1895	By	12,467	
327	DIAMINE VIOLET N.....1889 Sodium salt of diphenyl-disazo-bi-amido-naphthol-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (2)\text{NH}_2 \\ (8)\text{OH} \\ (6)\text{SO}_2\text{Na} \end{Bmatrix} \\ [1] \left  \begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (2)\text{NH}_2 \\ (8)\text{OH} \\ (6)\text{SO}_2\text{Na} \end{Bmatrix} \end{array} \right.$ Benzo Fast Violet NC..... Diamine Violet N.....	By C	12,107	2,860
327a	BENZO FAST VIOLET R (S.; S. H. IV, 1730).....1899	By	4,680	
327b	NAPHTHAMINE VIOLET R.....	K	476	
328	DIANOL BLACK RW.....1899 Sodium salt of diphenyl-disazo-bi-amido-naphthol-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}[7]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (2)\text{NH}_2 \\ (8)\text{OH} \\ (6)\text{SO}_2\text{Na} \end{Bmatrix} \\ [1] \left  \begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}[7]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (2)\text{NH}_2 \\ (8)\text{OH} \\ (6)\text{SO}_2\text{Na} \end{Bmatrix} \end{array} \right.$	Lev	2,253	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
329	DIAMINE BROWN V.....1899 Sodium salt of diphenyl-disazo-m-phenylene-diamine-2-amido-8-naphthol-6-sulphonic acid.	C	0	
330	ZAMBESI BROWN.....1894 Sodium salt of diphenyl-disazo-2-amido-8-naphthol-6-sulphonic-2,7-naphthylene-diamine-sulphonic acid.  $[1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}[7]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 2\text{NH}_2 \\ 8\text{OH} \\ 6\text{SO}_3\text{Na} \end{array} \right. \\ \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 2\text{NH}_2 \\ 7\text{NH}_2 \\ 8\text{SO}_3\text{Na} \end{array} \right. \end{array} \right.$ Zambesi Brown G..... Zambesi Brown 2 G.....	A A	498	\$111
330a	ZAMBESI BROWN 4 R (S.; Kal. 1909).....	A	3,530	
331	ALKALI DARK BROWN G, V.....1907 Mixed disazo compounds from benzidine, tolidine, or dianisidine, and 1 mol. of the bisulphite derivative of nitroso-β-naphthol + 1 mol. of an amido-naphthol-sulphonic acid.	WD	0	
332	BENZO FAST RED.....1902 Sodium salt of diphenyl-disazo-2-amido-8-naphthol-6-sulphonic-2-naphthylamine-3,6-disulphonic acid.  $[1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[7]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 2\text{NH}_2 \\ 8\text{OH} \\ 6\text{SO}_3\text{Na} \end{array} \right. \\ \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 2\text{NH}_2 \\ 3\text{SO}_3\text{Na} \\ 6\text{SO}_3\text{Na} \end{array} \right. \end{array} \right.$ Benzo Fast Red 8 BL..... Benzo Fast Red D..... Benzo Fast Red GL (S.; S. H. IV, 1583).....1902 Benzo Fast Red L (S.; S. H. IV, 1581).....1900	By By By By	5,985	1,775
333	OXAMINE BLACK.....1890 Sodium salt of diphenyl-disazo-amido-naphthol-sulphonic-acid-amido-naphthol-disulphonic acid.  $[1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4[4]-\text{N}_2-[7]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 2\text{NH}_2 \\ 8\text{OH} \\ 6\text{SO}_3\text{Na} \end{array} \right. \\ \text{C}_6\text{H}_4[4]-\text{N}_2-[7]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 8\text{OH} \\ 3\text{SO}_3\text{Na} \\ 6\text{SO}_3\text{Na} \end{array} \right. \end{array} \right.$ Oxamine Black BHN extra..... Oxamine Black BHX (S.; Kal. 1908)..... Diazo Black BHN..... Diazo Black BHN extra..... Diazo Black BHN extra conc..... Diazo Black BHN extra conc 25283..... Renolamine Black BHN extra conc..... Renolamine Black BHN extra conc..... Diazo Black BHAD conc.....	B B By By By By By G S	417,423	57,464
333a	DIRECT BLACK FBS.....	CG	8,818	
333b	DIAMINE BLACK (V. M.)..... Diamine Black A 73 (S.; S. H. IV, 1131, 1134, 1212, 1315, 1911). (Current marks, B, BH, BO, DB, DN, HW, RO, BX, RMW.) Diamine Black AA 397..... Diamine Black B 74..... Diamine Black BB 398..... Diamine Black 13 F 885..... Diamine Black 6 D 515..... Diamine Black 6 H 712..... Diamine Black 36 K 1464..... Diamine Black 19 M 1041.....	C C C C C C C C C	171,211	19,634

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
333c	MELANTHERINE (V. M.)..... Melantherine 1H (S.; S. H. IV, 1698)..... 1902 Melantherine 11518..... Melantherine 12760.....	I I I	4,423	31,104
333d	DEVELOP BLACK..... Develop Black..... Develop Black NZ.....	WD Q	17,495	4,323
334	DIPHENYL BLUE BLACK double..... 1905 Sodium salt of diphenyl-diazo-ethyl-amido-naphthol-sul- phonic-amido-naphthol-disulphonic acid. $\begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2-[7]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 2\text{NHC}_2\text{H}_5 \\ 8\text{OH} \\ 6\text{SO}_2\text{Na} \\ 1\text{NH}_2 \\ 8\text{OH} \\ 3\text{SO}_2\text{Na} \\ 6\text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2-[7]\text{C}_{10}\text{H}_7 \\ \text{C}_6\text{H}_4(4)-\text{N}_2-[7]\text{C}_{10}\text{H}_7 \end{array} \right. \end{array}$	G	26,940	
335	NAPHTHAMINE BLACK..... 1893 Sodium salt of diphenyl-diazo-1.8-amido-naphthol-4.6-sul- phonic-2.8-amido-naphthol-6-sulphonic acid. $\begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}-\text{N}-[7]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 8\text{OH} \\ 4\text{SO}_2\text{Na} \\ 6\text{SO}_2\text{Na} \\ 2\text{NH}_2 \\ 8\text{OH} \\ 6\text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}-\text{N}-[7]\text{C}_{10}\text{H}_7 \\ \text{C}_6\text{H}_4(4)-\text{N}-\text{N}-[7]\text{C}_{10}\text{H}_7 \end{array} \right. \end{array}$ Naphthamine Black 163 (S.). (Current marks, BVE, CE, CET, H, RE, REN, VE.)..... Naphthamine Black 387..... Naphthamine Black 3931..... Naphthamine Black 3932..... Naphthamine Black 4664..... Naphthamine Black 4670..... Naphthamine Black 4671..... Naphthamine Black 4673..... Naphthamine Black 4676..... Naphthamine Black 4678.....	K K K K K K K K K K	47,900	7,122
335a	NAPHTHAMINE DEEP BLACK HW (S.).....	K	1,047	
336	BENZO CYANINE R..... 1893 Sodium salt of diphenyl-diazo-1.8-amido-naphthol-3.6-disul- phonic-2.8-amido-naphthol-4-sulphonic acid. $\begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}-\text{N}-[7]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 8\text{OH} \\ 3\text{SO}_2\text{Na} \\ 6\text{SO}_2\text{Na} \\ 2\text{NH}_2 \\ 8\text{OH} \\ 6\text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}-\text{N}-[7]\text{C}_{10}\text{H}_7 \\ \text{C}_6\text{H}_4(4)-\text{N}-\text{N}-[7]\text{C}_{10}\text{H}_7 \end{array} \right. \end{array}$	By	901	
337	BENZO BLUE 2 B..... 1890 Sodium salt of diphenyl-diazo-bi-amido-naphthol-disulphonic acid. $\begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}-\text{N}[7]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 8\text{OH} \\ 3\text{SO}_2\text{Na} \\ 6\text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}-\text{N}[7]\text{C}_{10}\text{H}_7 \\ \text{C}_6\text{H}_4(4)-\text{N}-\text{N}[7]\text{C}_{10}\text{H}_7 \end{array} \right. \end{array}$	By	19,085	
338	NAPHTHAMINE BLUE..... 1897 Sodium salt of diphenyl (or ditolyl)-diazo-bi-1.8-amido-naph- thol-4.6-disulphonic acid. $\begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}-\text{N}-[7]\text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 8\text{OH} \\ 4\text{SO}_2\text{Na} \\ 6\text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}-\text{N}-[7]\text{C}_{10}\text{H}_7 \\ \text{C}_6\text{H}_4(4)-\text{N}-\text{N}-[7]\text{C}_{10}\text{H}_7 \end{array} \right. \end{array}$		11,707	2,455

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
338	NAPHTHAMINE BLUE—Continued. Naphthamine Blue 1575 (S.; Kal. 1907; 1910; 1911; 1912; 1914). (Current marks, B, 2 B, 3 B, 5 B, 7 B, 12 B, BE, BKR, GE, R, 2 R, 3 R, 2 RE, 8 B.) Naphthamine Blue 3682..... Naphthamine Blue 3689..... Naphthamine Blue 3693..... Naphthamine Blue 4582..... Naphthamine Blue 4583..... Naphthamine Blue 4584.....	K K K K K K K		
339	BRILLIANT ORANGE G.....1894 Sodium salt of diphenyl-disazo-salicylic-amidophenol-sul- phonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[4]\text{C}_6\text{H}_3\left\{\begin{array}{l} (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{array}\right. \\ [1] \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-\text{C}_6\text{H}_3(\text{NH}_2)(\text{OH})(\text{SO}_3\text{Na}) \end{array}$	A	6,321	
340	BENZO ORANGE R.....1887 Sodium salt of diphenyl-disazo-salicylic-naphthonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[4]\text{C}_6\text{H}_3\left\{\begin{array}{l} (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{array}\right. \\ [1] \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{NH}_2 \\ (4)\text{SO}_3\text{Na} \end{array}\right. \end{array}$	By	575	
340a	BENZO FAST ORANGE WS (S.; Kal. 1912; S. H. IV, 1540)...	By	496	
341	CRUMPSALL DIRECT FAST RED R.....1886 Sodium salt of diphenyl-disazo-salicylic- $\beta$ -naphthol-3,6-disul- phonic acid.	Lev	0	
342	CHRYSAMINE.....1884 Sodium salt of diphenyl-disazo-bi-salicylic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[4]\text{C}_6\text{H}_3\left\{\begin{array}{l} (1)\text{OH} \\ (2)\text{CO}_2\text{H} \end{array}\right. \\ [1] \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[4]\text{C}_6\text{H}_3\left\{\begin{array}{l} (2)\text{CO}_2\text{H} \\ (1)\text{OH} \end{array}\right. \end{array}$ Chrysamine G..... Chrysamine K.....	By S	606	\$115
343	DIAMINE FAST RED.....1880 Sodium salt of diphenyl-disazo-salicylic-amido-naphthol-sul- phonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (2)\text{NH}_2 \\ (8)\text{OH} \\ (6)\text{SO}_3\text{Na} \end{array}\right. \\ [1] \text{C}_6\text{H}_4[4]-\text{N}=\text{N}-[4]\text{C}_6\text{H}_3\left\{\begin{array}{l} (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{array}\right. \end{array}$ Columbia Fast Red F..... Oxamine Fast Red F..... Benzo Fast Red FC..... Diamine Fast Red F..... Diamine Fast Red 57 A 1981 (S.; Kal. 1912). (Current marks, 8 BL, F.)..... Diamine Fast Red 56 Z 1980..... Naphthamine Red 3005 H..... Hessian Fast Red F..... Diphenyl Fast Red..... Direct Fast Red F.....	A B By C C C K L G I	47,794	17,121
343a	DIRECT FAST RED (V. M.)..... Direct Fast Red 17727..... Direct Fast Red 25420..... Direct Fast Red.....	I I Q	2,755	1,149
344	DIAMINE BROWN.....1880 Sodium salt of diphenyl-disazo-salicylic-amido-naphthol-sul- phonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_6\text{H}_3\left\{\begin{array}{l} (1)\text{OH} \\ (2)\text{CO}_2\text{H} \end{array}\right. \\ [1] \text{C}_6\text{H}_4[4]-\text{N}_2-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} (1)\text{OH} \\ (7)\text{NH}_2 \\ (3)\text{SO}_3\text{Na} \end{array}\right. \end{array}$		63,716	12,457

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
344	DIAMINE BROWN—Continued.			
	Oxamine Brown R.....	B		
	Oxamine Brown RG.....	B		
	Diamine Brown AA 440 (S.; S. H. IV, 1133, 1140, 1152, 1778-84). (Current marks, ATC, B, GG, 3 G, 5 G, M, MR, OO, QQ, R, E 4 G, S, V, 31, 32, 33, 34, 35, 36, 37, 39, 40, 41, 43.).....	C		
	Diamine Brown BB 441.....	C		
	Diamine Brown II J 838.....	C		
	Diamine Brown 36 J 1463.....	C		
	Diamine Brown W 436.....	C		
	Diamine Brown 31 W 1351.....	L		
	Direct Dark Brown M.....	I		
	Renol Brown MB.....	tM		
	Renol Brown MB conc.....	tM		
	Renol Brown RA extra conc. (Kal. 1907; 1909; 1911).....	tM		
	Renol Brown RA extra.....	tM		
	Direct Brown M conc.....	I		
344a	DIRECT BROWN (V. M.).....		1, 660	3263
	Direct Brown RW.....	Q		
	Direct Brown 102.....	Q		
345	OXAMINE MAROON.....1893 Sodium salt of diphenyl-disazo-salicylic-1.5-amido-naphthol- 7-sulphonic acid.	B	0	
346	OXAMINE RED.....1893 Sodium salt of diphenyl-disazo-salicylic-2.5-amido-naphthol- 7-sulphonic acid.		11, 636	2, 563
	$\begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2-[4]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{array} \right. \\ (1) \left  \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2-[4]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} (5)\text{OH} \\ (2)\text{NH}_2 \\ (7)\text{SO}_2\text{Na} \end{array} \right. \end{array} \right. \end{array}$			
	Oxamine Red.....	B		
	Oxamine Red BNX (S. 1909).....	B		
	Oxamine Red 3 B (S.; Kal. 1908).....	B		
347	DIPHENYL BROWN RN.....1895 Sodium salt of diphenyl-disazo-salicylic-ethyl-2-amido-8- naphthol-6-sulphonic acid.	G	0	
348	DIPHENYL BROWN BN.....1895 Sodium salt of diphenyl-disazo-salicylic-dimethyl-2-amido- 8-naphthol-6-sulphonic acid.		13, 671	4, 915
	$\begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2-[4]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{array} \right. \\ (1) \left  \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2-[1]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} (3)\text{OH} \\ (2)\text{N}(\text{CH}_3)_2 \\ (6)\text{SO}_2\text{Na} \end{array} \right. \end{array} \right. \end{array}$			
	Diphenyl Brown BBNC.....	G		
	Diphenyl Brown BGN superfine.....	G		
	Diphenyl Brown BVCN (Kal. 1911).....	G		
	Diphenyl Brown GS (Kal. 1907).....	G		
349	DIAMINE BROWN B.....1894 Sodium salt of diphenyl-disazo-salicylic-phenyl-2-amido-8- naphthol-6-sulphonic acid.	C	0	
350	ALKALI YELLOW R.....1899 Sodium salt of diphenyl-disazo-salicylic-dehydro-thio-tolui- dine-sulphonic acid.	WD	0	
351	CRESOTINE YELLOW.....1883 Sodium salt of diphenyl-disazo-bi-o-cresol-carboxylic acid.		1, 743	323
	$\begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2-[4]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} (1)\text{OH} \\ (2)\text{CH}_3 \\ (6)\text{CO}_2\text{Na} \end{array} \right. \\ (1) \left  \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2-[4]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} (1)\text{OH} \\ (2)\text{CH}_3 \\ (6)\text{CO}_2\text{Na} \end{array} \right. \end{array} \right. \end{array}$			
	Cresotine Yellow G.....	M		
	Cresotine Yellow G.....	GrE		
	Cresotine Yellow GOO.....	GrE		

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
352	DIRECT VIOLET R.....1894 Sodium salt of diphenyl-disazo-m-toluylene-diamine-dioxy-naphthoic-sulphonic acid.  $[1] \begin{cases} C_6H_4(4)-N_2-[4]C_6H_5 \begin{cases} [1]NH_2 \\ [3]NH_2 \\ [6]CH_3 \\ [1]OH \\ [7]OH \\ [2]CO_2Na \\ [4]SO_2Na \end{cases} \\ C_6H_4(4)-N_2-[8]C_{10}H_7 \begin{cases} [1]OH \\ [7]OH \\ [2]CO_2Na \\ [4]SO_2Na \end{cases} \end{cases}$	Q	661	\$171
353	DIRECT INDIGO BLUE BN.....1893 Sodium salt of diphenyl-disazo-dioxynaphthoic-sulphonio-amido-naphthol-disulphonic acid.  $[1] \begin{cases} C_6H_4(4)-N_2-[8]C_{10}H_7 \begin{cases} [1]OH \\ [7]OH \\ [2]CO_2Na \\ [4]SO_2Na \end{cases} \\ C_6H_4(4)-N_2-C_{10}H_7 \begin{cases} [1]NH_2 \\ [7]OH \\ (SO_2Na)_2 \end{cases} \end{cases}$	I	6,000	
354	DIRECT GRAY R.....1891 Sodium salt of diphenyl-disazo-bi-dioxynaphthoic-sulphonic acid.	I	0	
355	ANTHRACENE RED.....1892 Sodium salt of nitrodiphenyl-disazo-salicylic- $\alpha$ -naphthol-sulphonic acid.  $[1] \begin{cases} C_6H_5 \begin{cases} [4]-N_2-[2]C_{10}H_7 \begin{cases} [1]OH \\ [3]NO_2 \end{cases} \\ [3]NO_2 \end{cases} \\ C_6H_4(4)-N_2-[4]C_6H_5 \begin{cases} [1]OH \\ [2]CO_2Na \end{cases} \end{cases}$ Anthracene Red WB powder..... Anthracene Red..... Anthracene Red..... Anthracene Red 10430.....	B By I I	3,873	1,086
356	DIANOL RED 2 B.....1896 Sodium salt of dichlorodiphenyl-disazo-bi-naphthionic acid.  $[1] \begin{cases} C_6H_5 \begin{cases} [4]-N_2-[2]C_{10}H_7 \begin{cases} [1]NH_2 \\ [3]Cl \\ [4]SO_2Na \end{cases} \\ [3]Cl \end{cases} \\ C_6H_5 \begin{cases} [4]-N_2-[2]C_{10}H_7 \begin{cases} [1]NH_2 \\ [3]Cl \\ [4]SO_2Na \end{cases} \\ [4]SO_2Na \end{cases} \end{cases}$	Lev	0	
356a	DIANOL BROWN..... Dianol Brown CDFB..... Dianol Brown LF.....	Lev Lev	200	43
356b	DIANOL ORANGE 217 A.....	Lev	3,323	
356c	DIANOL ORANGE BROWN 223.....	Lev	300	
357	DIANOL RED B.....1896 Sodium salt of dichlorodiphenyl-disazo-bi- $\beta$ -naphthylamine-sulphonic acid.	Lev	0	
358	DIPHENYL RED.....1896 Sodium salt of dichlorobenzidine-disazo-bi- $\beta$ -naphthylamine-disulphonic acid.  $[1] \begin{cases} C_6H_5 \begin{cases} [4]-N_2-[1]C_{10}H_7 \begin{cases} [2]NH_2 \\ [3]SO_2Na \\ [6]SO_2Na \end{cases} \\ [3]Cl \end{cases} \\ C_6H_5 \begin{cases} [4]-N_2-[1]C_{10}H_7 \begin{cases} [2]NH_2 \\ [3]SO_2Na \\ [6]SO_2Na \end{cases} \\ [3]Cl \end{cases} \end{cases}$ Toluylene Red OO..... Diphenyl Red 8 B..... Diphenyl Red 340..... Diphenyl Red (bluish) 184..... Chlorantine Red.....	GrE G G G I	12,808	5,001
358a	FAST TOLUYLENE RED.....	GrE	1,497	



## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
359	TRYPAN RED.....1906 Sodium salt of disulpho-diphenyl-disazo-bi-nitro-m-phenylene-diamine.	M	0	
360	PYRAMINE ORANGE R.....1893 Sodium salt of disulpho-diphenyl-disazo-bi-nitro-m-phenylene-diamine. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} (4)-\text{N}_2-[4]\text{C}_6\text{H}_5 \\ \text{SO}_2\text{Na} \end{array} \right. \left\{ \begin{array}{l} (1)\text{NH}_2 \\ (3)\text{NH}_2 \\ (6)\text{NO}_2 \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_5 \\ \text{SO}_2\text{Na} \end{array} \right. \left\{ \begin{array}{l} (1)\text{NH}_2 \\ (3)\text{NH}_2 \\ (6)\text{NO}_2 \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} (4)-\text{N}_2-[4]\text{C}_6\text{H}_5 \\ \text{SO}_2\text{Na} \end{array} \right. \left\{ \begin{array}{l} (1)\text{NH}_2 \\ (3)\text{NH}_2 \\ (6)\text{NO}_2 \end{array} \right. \end{array}$	B	21,329	
361	SULPHONAZURINE.....1883 Sodium salt of disulpho-diphenyl-sulphone-disazo-bi-phenyl- $\beta$ -naphthylamine. $\text{O}_2\text{S} \left\{ \begin{array}{l} \text{C}_6\text{H}_4(\text{SO}_2\text{Na})-\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_7[2]\text{NHC}_6\text{H}_5 \\ \text{C}_6\text{H}_4(\text{SO}_2\text{Na})-\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_7[2]\text{NHC}_6\text{H}_5 \end{array} \right.$	By	0	
361a	BRILLIANT SULPHONAZURINE R (S.; S. H. IV, 1365).1892	By	300	
362	OXY DIAMINE ORANGE.....1886 Sodium salt of ditolyl-disazo-bi-m-tolylene-diamine-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} (3)\text{CH}_3 \\ (4)-\text{N}=\text{N}-[2]\text{C}_6\text{H}_5 \end{array} \right. \left\{ \begin{array}{l} (6)\text{CH}_3 \\ (1)\text{NH}_2 \\ (3)\text{NH}_2 \\ (4)\text{SO}_2\text{Na} \\ (6)\text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_5 \\ (3)\text{CH}_3 \end{array} \right. \left\{ \begin{array}{l} (4)-\text{N}=\text{N}-[2]\text{C}_6\text{H}_5 \\ (1)\text{NH}_2 \\ (3)\text{NH}_2 \\ (6)\text{CH}_3 \end{array} \right. \end{array}$ Pyramine Orange RT..... Oxy diamine Orange 2 A 606. (Current marks, G, R, RN.)... Oxy diamine Orange 37 B 1481..... Oxy diamine Orange BB 606..... Oxy diamine Orange 69 P 2303..... Direct Orange R..... Direct Orange R 16665.....	B C C C C I I	19,905	\$4,223
362a	PYRAMINE ORANGE 2 GX (S. 1895; Kal. 1911).....	B	6,003	
363	BENZOPURPURINE 4 B.....1884 Sodium salt of ditolyl-disazo-bi-naphthionic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} (3)\text{CH}_3 \\ (4)-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7 \end{array} \right. \left\{ \begin{array}{l} (1)\text{NH}_2 \\ (4)\text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_5 \\ (3)\text{CH}_3 \end{array} \right. \left\{ \begin{array}{l} (4)-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7 \\ (1)\text{NH}_2 \end{array} \right. \end{array}$ Benzopurpurine 4 B extra..... Benzopurpurine 4 B extra extra 60 : 100..... Benzopurpurine 4 BM..... Cotton Red 4 B..... Cotton Fast Red 4 B8P..... Cotton Red (S.)..... Benzopurpurine 4 B..... Benzopurpurine 4 B extra..... Benzopurpurine 4 B conc. 24895..... Benzopurpurine 4 B conc..... Benzopurpurine 4 BN..... Benzopurpurine 4 BP 070..... Benzopurpurine 4 B extra conc..... Benzopurpurine 4 B conc..... Benzopurpurine 4 B conc. 90 per cent..... Benzopurpurine 4 B..... Benzopurpurine 4 B double..... Benzopurpurine 4 B extra conc..... Sultan 5 B..... Benzopurpurine 4 B conc..... Benzopurpurine 4 BN..... Benzopurpurine 4 BX.....	A A A B B B By By By BK BK GRE tM tM tM AW AW G H Q Q Q	341,724	45,233

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
363a	DIAMINE RED (V. M.)..... Diamine Red 56 N 1908 (S.; S. H. IV, 1206). (Current marks, B, 3 B, 4 B, 5 B, 6 B, 10 B, D, J, NO, NNO.)..... Diamine Red 56 S 1973.....	C C	9,908	\$1,609
364	DIAZO BRILLIANT BLACK.....1885 Sodium salt of ditolyl-disazo-bi- $\alpha$ -naphthylamine-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{CH}_3 \\ [4] \end{Bmatrix} - \text{N} = \text{N} - [2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [1]\text{NH}_2 \\ [5]\text{SO}_2\text{Na} \end{Bmatrix} \\ [1] \left  \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [4] \end{Bmatrix} - \text{N} = \text{N} - [2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [5]\text{SO}_2\text{Na} \\ [1]\text{NH}_2 \end{Bmatrix} \\ [3]\text{CH}_3 \end{array} \right.$	By By	9,171	2,409
365	BENZOPURPURINE B.....1885 Sodium salt of ditolyl-disazo-bi- $\beta$ -naphthylamine-6-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{CH}_3 \\ [4] \end{Bmatrix} - \text{N} = \text{N} - [1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [2]\text{NH}_2 \\ [6]\text{SO}_2\text{Na} \end{Bmatrix} \\ [1] \left  \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [4] \end{Bmatrix} - \text{N} = \text{N} - [1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [6]\text{SO}_2\text{Na} \\ [2]\text{NH}_2 \end{Bmatrix} \\ [3]\text{CH}_3 \end{array} \right.$	A M S H	3,913	961
365a	BENZOPURPURINE (V. M.)..... Benzopurpurine AM..... Benzopurpurine AM 27019..... Benzopurpurine extra..... Benzopurpurine.....	By By AW I	12,177	451
366	DELTAPURPURINE 5 B.....1886 Sodium salt of ditolyl-disazo-bi- $\beta$ -naphthylamine-6-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{CH}_3 \\ [4] \end{Bmatrix} - \text{N} = \text{N} - [1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [2]\text{NH}_2 \\ [6]\text{SO}_2\text{Na} \end{Bmatrix} \\ [1] \left  \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [4] \end{Bmatrix} - \text{N} = \text{N} - [1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [7]\text{SO}_2\text{Na} \\ [2]\text{NH}_2 \end{Bmatrix} \\ [3]\text{CH}_3 \end{array} \right.$	A B By AW AW I S	20,284	3,646
366a	DELTAPURPURINE 3 B.....	AW	774	
367	DIAMINE RED 3 B.....1886 Sodium salt of ditolyl-disazo-bi- $\beta$ -naphthylamine-7-sulphonic acid.	A	0	
368	BRILLIANT PURPURINE 4 B.....1885 Sodium salt of ditolyl-disazo-naphthionic- $\beta$ -naphthylamine-6-sulphonic acid.	A	0	
368a	BRILLIANT PURPURINE 10 B (S. 1900).....	A	6,634	
369	BRILLIANT PURPURINE R.....1887 Sodium salt of ditolyl-disazo-naphthionic- $\beta$ -naphthylamine-disulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{CH}_3 \\ [4] \end{Bmatrix} - \text{N} = \text{N} - [1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [2]\text{NH}_2 \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{Bmatrix} \\ [1] \left  \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [4] \end{Bmatrix} - \text{N} = \text{N} - [2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [1]\text{NH}_2 \\ [4]\text{SO}_2\text{Na} \end{Bmatrix} \\ [3]\text{CH}_3 \end{array} \right.$	A	3,051	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
370	BRILLIANT CONGO.....1896 Sodium salt of ditolyl-disazo- $\beta$ -naphthylamine-6-sulphonic- $\beta$ -naphthylamine-3,6-disulphonic acid. $[1] \begin{array}{l} \text{C}_6\text{H}_5 \begin{Bmatrix} (3)\text{CH}_3 \\ (4) \end{Bmatrix} - \text{N} = \text{N} - [1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (2)\text{NH}_2 \\ (6)\text{SO}_3\text{Na} \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} (4) \end{Bmatrix} - \text{N} = \text{N} - [1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (2)\text{NH}_2 \\ (3)\text{SO}_3\text{Na} \\ (6)\text{SO}_3\text{Na} \end{Bmatrix} \end{array}$ Brilliant Congo R..... Brilliant Congo R..... Brilliant Congo R.....		19,139	\$3,123
371	ROSAZURINE G.....1896 Sodium salt of ditolyl-disazo-ethyl- $\beta$ -naphthylamine-7-sulphonic- $\beta$ -naphthylamine-7-sulphonic acid.	By	0	
372	ROSAZURINE B.....1896 Sodium salt of ditolyl-disazo-bi-ethyl- $\beta$ -naphthylamine-7-sulphonic acid.	By	0	
373	CONGO ORANGE.....1899 Sodium salt of ditolyl-disazo-phenetol- $\beta$ -naphthylamine-disulphonic acid. $[1] \begin{array}{l} \text{C}_6\text{H}_5 \begin{Bmatrix} (3)\text{CH}_3 \\ (4) \end{Bmatrix} - \text{N} = \text{N} - [1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (2)\text{NH}_2 \\ (3)\text{SO}_3\text{Na} \\ (6)\text{SO}_3\text{Na} \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} (4) \end{Bmatrix} - \text{N} = \text{N} - [1]\text{C}_8\text{H}_4(4)\text{OC}_2\text{H}_5 \end{array}$ Congo Orange R..... Congo Orange R..... Congo Orange RG (S.).....1907	A By By	7,027	3,578
374	CONGO RED 4 R.....1896 Sodium salt of ditolyl-disazo-resorcin-naphthionic acid.	By	0	
375	CONGO CORINTH.....1885 Sodium salt of ditolyl-disazo-naphthionio- $\alpha$ -naphthol-4-sulphonic acid. $[1] \begin{array}{l} \text{C}_6\text{H}_5 \begin{Bmatrix} (3)\text{CH}_3 \\ (4) \end{Bmatrix} - \text{N} = \text{N} - [2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (1)\text{NH}_2 \\ (4)\text{SO}_3\text{Na} \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} (4) \end{Bmatrix} - \text{N} = \text{N} - [2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (1)\text{SO}_3\text{Na} \\ (1)\text{OH} \end{Bmatrix} \end{array}$ Congo Corinth B..... Congo Corinth B 99947..... Congo Corinth B.....	A A By	2,196	315
376	PYRAMIDOL BROWN T.....1898 Sodium salt of ditolyl-disazo-bi-resorcin.	FA	0	
377	AZO BLUE.....1885 Sodium salt of ditolyl-disazo-bi- $\alpha$ -naphthol-4-sulphonic acid. $[1] \begin{array}{l} \text{C}_6\text{H}_5 \begin{Bmatrix} (3)\text{CH}_3 \\ (4) \end{Bmatrix} - \text{N} = \text{N} - [2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (1)\text{OH} \\ (4)\text{SO}_3\text{Na} \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} (4) \end{Bmatrix} - \text{N} = \text{N} - [2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (4)\text{SO}_3\text{Na} \\ (1)\text{OH} \end{Bmatrix} \end{array}$	By	496	
378	TRISULPHON BLUE.....1896 Sodium salt of ditolyl-disazo- $\beta$ -naphthol- $\alpha$ -naphthol-3,6,8-trisulphonic acid. $[1] \begin{array}{l} \text{C}_6\text{H}_5 \begin{Bmatrix} (3)\text{CH}_3 \\ (4) \end{Bmatrix} - \text{N} = \text{N} - [2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (1)\text{OH} \\ (3)\text{SO}_3\text{Na} \\ (6)\text{SO}_3\text{Na} \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} (4) \end{Bmatrix} - \text{N} = \text{N} - [1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} (2)\text{OH} \\ (8)\text{SO}_3\text{Na} \end{Bmatrix} \end{array}$ Trisulphon Blue R..... Trisulphon Blue R conc..... Trisulphon Blue R conc. 7:10.....	S S S	911	250

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
379	<b>BENZO NEW BLUE</b> .....1890 Sodium salt of ditolyl-disazo- $\alpha$ -naphthol-4-sulphonic-chromotropic acid. $[1] \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{CH}_3 \\ [4]-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [1]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{Bmatrix} \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} [4]-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [1]\text{OH} \\ [3]\text{SO}_2\text{Na} \end{Bmatrix} \end{Bmatrix} \\ [3]\text{CH}_3 \end{array}$ Benzo New Blue 2 B (S. H. IV, 1709-1710)..... Benzo New Blue 5 B (S.; Kal. 1910).....	By By	7,577	\$912
379a	<b>NAPHTHAMINE BRILLIANT BLUE</b> ..... Naphthamine Brilliant Blue B.....1907 Naphthamine Brilliant Blue G 3701.....	K K	5,865	1,968
379b	<b>DIRECT BLUE 5 B</b> .....	BK	992	
380	<b>DIANIL BLUE B</b> .....1890 Sodium salt of ditolyl-disazo-bi-chromotropic acid.	M	0	
381	<b>AZO BLACK BLUE</b> .....1890 Sodium salt of ditolyl-disazo-m-oxy-diphenylamine-1-amido- $\beta$ -naphthol-3,6-sulphonic acid.	GrE	0	
382	<b>AZO MAUVE B</b> .....1890 Sodium salt of ditolyl-disazo- $\alpha$ -naphthylamine-1,8-amido-naphthol-3,6-disulphonic acid.	GrE	0	
383	<b>NAPHTHAZURINE</b> .....1891 Sodium salt of ditolyl-disazo- $\beta$ -naphthylamine-1,8-amido-naphthol-3,6-disulphonic acid. $[1] \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [4]-\text{N}_2-[1]\text{C}_{10}\text{H}_6[2]\text{NH}_2 \\ [3]\text{CH}_3 \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{CH}_3 \\ [4]-\text{N}_2-[7]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [1]\text{NH}_2 \\ [8]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{Bmatrix} \end{Bmatrix} \end{array}$ Naphthazurine 3703..... Naphthazurine BA.....	K GrE	4,782	1,068
384	<b>CHICAGO BLUE 2 R</b> .....1894 Sodium salt of ditolyl-disazo-2-naphthol-8-sulphonic-1,8-amido-naphthol-4-sulphonic acid. $[1] \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{CH}_3 \\ [4]-\text{N}=\text{N}-[1]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [2]\text{OH} \\ [8]\text{SO}_2\text{Na} \end{Bmatrix} \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} [4]-\text{N}=\text{N}-[7]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [1]\text{NH}_2 \\ [8]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{Bmatrix} \end{Bmatrix} \\ [3]\text{CH}_3 \end{array}$	A	2,152	
384a	<b>DIAMINE BLUE (V. M.)</b> ..... Diamine Blue 32 C 1357 (S.; S. H. IV, 1128, 1128, 1196, 1209, 1211, 1243, 1671, 1672). (Current marks, AB, AZ, B, 2 B, 3 B, BG, BX, C 4 B, CBG, 6 G, C 2 R, C 4 R, LG, LR, NC, RW, 3 R, SRX, 50, 52, 53 A, 55, 56.)..... Diamine Blue 4 L 472..... Diamine Blue R 43..... Diamine Blue SSS 212..... Diamine Blue 3 T 213..... Diamine Blue WW 403.....	C C C C C C	21,725	2,687
385	<b>OXAMINE BLUE</b> .....1893 Sodium salt of ditolyl-disazo- $\alpha$ -naphthol-sulphonic-amido-naphthol-sulphonic acid. $[1] \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [4]-\text{N}_2-[2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [1]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{Bmatrix} \\ [3]\text{CH}_3 \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{CH}_3 \\ [4]-\text{N}_2-[6]\text{C}_{10}\text{H}_7 \begin{Bmatrix} [2]\text{NH}_2 \\ [5]\text{OH} \\ [7]\text{SO}_2\text{Na} \end{Bmatrix} \end{Bmatrix} \end{array}$ Oxamine Blue 4 R..... Benzazurine 3 R.....	B GrE	573	108

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
386	<b>BENZO BLUE</b> ..... 1890 Sodium salt of ditolyl-disazo- $\alpha$ -naphthol-sulphonic-amido-naphthol-disulphonic acid. $[1] \left\{ \begin{array}{l} C_6H_5 \left\{ \begin{array}{l} [3]CH_3 \\ [4]-N=N-[2]C_{10}H_7 \left\{ \begin{array}{l} [1]OH \\ [3]SO_2Na \\ [6]SO_2Na \\ [3]SO_2Na \\ [8]OH \\ [1]NH_2 \end{array} \right. \end{array} \right. \\ C_6H_5 \left\{ \begin{array}{l} [4]-N=N-[7]C_{10}H_7 \\ [3]CH_3 \end{array} \right. \end{array} \right.$ <b>Benzo Blue BX</b> ..... <b>Azidine Blue BX</b> .....	By CJ	1,740	\$305
387	<b>COLUMBIA BLUE</b> ..... 1894 Sodium salt of ditolyl-disazo- $\alpha$ -naphthol-3,8-disulphonic-1,8-amido-naphthol-4-sulphonic acid. $[1] \left\{ \begin{array}{l} C_6H_5 \left\{ \begin{array}{l} [3]CH_3 \\ [4]-N=N-[2]C_{10}H_7 \left\{ \begin{array}{l} [1]OH \\ [3]SO_2Na \\ [8]SO_2Na \\ [1]NH_2 \end{array} \right. \end{array} \right. \\ C_6H_5 \left\{ \begin{array}{l} [4]-N=N-[7]C_{10}H_7 \\ [3]CH_3 \end{array} \right. \left\{ \begin{array}{l} [8]OH \\ [4]SO_2Na \end{array} \right. \end{array} \right.$ <b>Columbia Blue G</b> ..... <b>Columbia Blue GM</b> .....	A A	7,004	1,142
388	<b>CHICAGO BLUE R</b> ..... 1894 Sodium salt of ditolyl-disazo-bi-1,8-amido-naphthol-4-sulphonic acid.	A	0	
389	<b>EBOLI BLUE B</b> ..... 1895 Sodium salt of ditolyl-disazo-bi-1,8-amido-naphthol-3,5-disulphonic acid.	L	0	
390	<b>BENZO CYANINE B</b> ..... 1893 Sodium salt of ditolyl-disazo-1,8-amido-naphthol-3,6-disulphonic-1,8-amido-naphthol-4-sulphonic acid. $[1] \left\{ \begin{array}{l} C_6H_5 \left\{ \begin{array}{l} [4]-N=N-[7]C_{10}H_7 \left\{ \begin{array}{l} [1]NH_2 \\ [8]OH \\ [3]SO_2Na \\ [6]SO_2Na \end{array} \right. \end{array} \right. \\ C_6H_5 \left\{ \begin{array}{l} [3]CH_3 \\ [4]-N=N-[7]C_{10}H_7 \left\{ \begin{array}{l} [1]NH_2 \\ [8]OH \\ [4]SO_2Na \end{array} \right. \end{array} \right. \end{array} \right.$	By	201	
391	<b>BENZO BLUE</b> ..... 1890 Sodium salt of ditolyl-disazo-bi-amido-naphthol-disulphonic acid. $[1] \left\{ \begin{array}{l} C_6H_5 \left\{ \begin{array}{l} [3]CH_3 \\ [4]-N=N-[7]C_{10}H_7 \left\{ \begin{array}{l} [1]NH_2 \\ [8]OH \\ [3]SO_2Na \\ [6]SO_2Na \\ [3]SO_2Na \\ [8]OH \\ [1]NH_2 \end{array} \right. \end{array} \right. \\ C_6H_5 \left\{ \begin{array}{l} [4]-N=N-[7]C_{10}H_7 \\ [3]CH_3 \end{array} \right. \end{array} \right.$ <b>Congo Blue 3 B</b> ..... <b>Benzo Blue 3 B</b> ..... <b>Trypan Blue</b> ..... <b>Azidine Blue 3 B conc.</b> .....	A By M CJ	1,205	225
392	<b>TOLUYLENE ORANGE</b> ..... 1888 Sodium salt of ditolyl-disazo-o-cresol-carboxylic-m-toluylenediamine-sulphonic acid. $[1] \left\{ \begin{array}{l} C_6H_5 \left\{ \begin{array}{l} [3]CH_3 \\ [4]-N=N-[4]C_6H_4 \left\{ \begin{array}{l} [6]CH_3 \\ [1]OH \\ [2]CO_2Na \\ [4]SO_2Na \end{array} \right. \end{array} \right. \\ C_6H_5 \left\{ \begin{array}{l} [4]-N=N-[2]C_6H_4 \\ [3]CH_3 \end{array} \right. \left\{ \begin{array}{l} [1]NH_2 \\ [3]NH_2 \\ [6]CH_3 \end{array} \right. \end{array} \right.$ <b>Toluylene Orange G extra 60:100</b> ..... <b>Phazo Orange G</b> ..... <b>Toluylene Orange G</b> .....	A By By	55,542	12,226

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
392	TOLUYLENE ORANGE—Continued. Azidine Orange G conc. 130 per cent..... Toluylene Orange G O O..... Direct Orange G..... Toluylene Orange G conc. 7:10.....	CJ GrE I S		
392a	RENOL ORANGE..... Renol Orange 3 AP..... Renol Orange 3 AP.....	TM G	631	\$2
392b	DIRECT ORANGE (V. M.)..... Direct Orange 1901..... Direct Orange 6693..... Direct Orange BR..... Direct Orange G conc.....	BK I S S	7,540	2, 71
392c	DIRECT FAST ORANGE 16710.....	I	2, 255	
392d	TOLUYLENE FAST ORANGE GL (S.).....1908	By	994	
393	DIPHENYL BROWN 3 GN.....1895 Sodium salt of ditolyl-disazo-salicylic-dimethyl-2-amido-8-naphthol-6-sulphonic acid.	G	0	
394	CHRYSAMINE R.....1894 Sodium salt of ditolyl-disazo-bi-salicylic acid.		6, 261	1, 20
	$\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{CH}_3 \\ [4] -\text{N}=\text{N}-\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [1] \text{OH} \\ [2] \text{CO}_2\text{Na} \end{array} \right. \\ [1] \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] -\text{N}=\text{N}-\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [2] \text{CO}_2\text{Na} \\ [1] \text{OH} \end{array} \right. \\ [3] \text{CH}_3 \end{array} \right. \end{array}$ Chrysamine R..... Chrysamine R.....	By I		
395	CRESOTINE YELLOW R.....1888 Sodium salt of ditolyl-disazo-bi-o-cresol-carboxylic acid.	GrE	0	
396	INDAZURINE RM.....1894 Sodium salt of ditolyl-disazo-1,7-dioxy-2-naphtholic-4-sulphonic- $\alpha$ -naphthol-4-sulphonic acid.	I	0	
397	DIRECT BLUE R.....1891 Sodium salt of ditolyl-disazo-1,7-dioxy-2-naphtholic-4-sulphonic- $\alpha$ -naphthol-4-sulphonic acid.	I	0	
398	DIRECT GRAY B.....1891 Sodium salt of ditolyl-disazo-bi-1,7-dioxy-6-naphtholic-3-sulphonic acid.	I	0	
399	INDAZURINE TS.....1894 Sodium salt of ditolyl-disazo-1,7-dioxy-2-naphtholic-3-sulphonic-2-amido-8-naphthol-6-sulphonic acid.	I	0	
400	ACID ANTHRACENE RED.....1904 Sodium salt of disulpho-ditolyl-disazo-bi- $\beta$ -naphthol.		14, 120	4, 15
	$\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [2] \text{SO}_2\text{Na} \\ [4] -\text{N}=\text{N}-[1] \text{C}_{10}\text{H}_7 [2] \text{OH} \\ [1] \end{array} \right. \\ [1] \left\{ \begin{array}{l} [5] \text{CH}_3 \\ [5] \text{CH}_3 \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] -\text{N}=\text{N}-[1] \text{C}_{10}\text{H}_7 [2] \text{OH} \\ [2] \text{SO}_2\text{Na} \end{array} \right. \end{array}$ Acid Anthracene Red 3 B..... Milling Scarlet 4 R..... Milling Scarlet 4 R conc.....	By M M		
400a	ACID ANTHRACENE RED (V. M.)..... Acid Anthracene Red 5 BL (S.; Kal. 1908)..... Acid Anthracene Red G (S.; Kal. 1905; S. H. IV, 2429).....	By By	2, 440	1, 014
400b	MILLING SCARLET (V. M.)..... Milling Scarlet B..... Milling Scarlet G.....	M M M	770	177
401	DIAMINE BLUE 3 R.....1887 Sodium salt of ethoxy-diphenyl-disazo-bi- $\alpha$ -naphthol-4-sulphonic acid.	C	0	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
402	DIAMINE BLUE BLACK E.....1899 Sodium salt of ethoxy-diphenyl-diazo-2,8-amido-naphthol-6-sulphonic-β-naphthol-3,7-disulphonic acid.	C	0	
403	DIAMINE BLACK BO.....1899 Sodium salt of ethoxy-diphenyl-diazo-bi-2,8-amido-naphthol-6-sulphonic acid.	C	0	
404	DIAMINE YELLOW N.....1887 Sodium salt of ethoxy-diphenyl-diazo-phenetol-salicylic acid.	C	0	
405	BENZOPURPURINE 10 B.....1895 Sodium salt of dimethoxy-diphenyl-diazo-bi-naphthionic acid.		67,768	\$11,181
	$\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{OCH}_3 \\ [4] - \text{N} = \text{N} - [2] \text{C}_6\text{H}_4 \left\{ \begin{array}{l} [1] \text{NH}_2 \\ [4] \text{SO}_2\text{Na} \end{array} \right. \\ [1] \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N} = \text{N} - [2] \text{C}_6\text{H}_4 \left\{ \begin{array}{l} [4] \text{SO}_2\text{Na} \\ [1] \text{NH}_2 \end{array} \right. \\ [3] \text{OCH}_3 \end{array} \right. \end{array}$			
	Benzopurpurine 10 B.....	A		
	Benzopurpurine 10 B.....	By		
	Benzopurpurine 10 B conc. 24197.....	By		
	Benzopurpurine 10 B 200 per cent.....	CG		
	Benzopurpurine 10 B.....	GrE		
	Benzopurpurine 10 B extra conc.....	tM		
	Benzopurpurine 10 B.....	AW		
	Benzopurpurine 10 B extra conc.....	AW		
	Benzopurpurine 10 B extra strong.....	AW		
	Benzopurpurine 10 B extra conc.....	G		
	Benzopurpurine 10 B.....	I		
	Benzopurpurine 10 B.....	S		
	Sultan 10 B.....	H		
	Sultan 10 B 20 per cent.....	H		
406	DIAZURINE B.....1891 Sodium salt of dimethoxy-diphenyl-diazo-bi-α-naphthyl-amine-5-sulphonic acid.	By	0	
407	AZO VIOLET.....1886 Sodium salt of dimethoxy-diphenyl-diazo-naphthionic-α-naphthol-4-sulphonic acid.	By	0	
408	AZOPHOR BLACK S.....1893 A mixture of tetrazo-dianisol with other diazo compounds, derivatives of benzidine, nitraniline, etc.	M	240	
409	TRISULPHON BLUE B conc. 1:3.....1896 Sodium salt of dimethoxy-diphenyl-diazo-β-naphthol-α-naphthol-3,6,8-trisulphonic acid.	S	563	
	$\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N}_2 - [1] \text{C}_6\text{H}_4 [2] \text{OH} \\ [3] \text{OCH}_3 \\ [3] \text{OCH}_3 \end{array} \right. \\ [1] \left\{ \begin{array}{l} [1] \text{OH} \\ [4] \text{SO}_2\text{Na} \\ [6] \text{SO}_2\text{Na} \\ [8] \text{SO}_2\text{Na} \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N}_2 - [2] \text{C}_6\text{H}_4 \left\{ \begin{array}{l} [1] \text{OH} \\ [4] \text{SO}_2\text{Na} \end{array} \right. \\ [3] \text{OCH}_3 \end{array} \right. \end{array}$			
409a	TRISULPHON BLUE 3 G.....	S	230	
410	BENZAZURINE (V. M.).....1885 Sodium salt of dimethoxy-diphenyl-diazo-bi-α-naphthol-4-sulphonic acid.		78,699	\$1,018
	$\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{OCH}_3 \\ [4] - \text{N} = \text{N} - [2] \text{C}_6\text{H}_4 \left\{ \begin{array}{l} [1] \text{OH} \\ [4] \text{SO}_2\text{Na} \end{array} \right. \\ [1] \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N} = \text{N} - [2] \text{C}_6\text{H}_4 \left\{ \begin{array}{l} [4] \text{SO}_2\text{Na} \\ [1] \text{OH} \end{array} \right. \\ [3] \text{OCH}_3 \end{array} \right. \end{array}$			
	Benzazurine G.....	A		
	Benzazurine G extra 40:100, easily soluble.....	A		
	Oxamine Blue A extra.....	B		
	Oxamine Blue A X.....	B		
	Benzazurine G.....	By		
	Benzazurine G conc.....	By		
	Benzazurine G conc. 21749.....	By		

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
410	<b>BENZAZURINE—Continued.</b> Benzaurine R..... Benzaurine 3684. (Current marks, G. R.) ..... Benzaurine 3706..... Benzoin Blue 5 GN conc..... Benzaurine G 250 per cent..... Azidine Blue B..... Azidine Blue B conc..... Azidine Blue BALG (Kal. 1914)..... Azidine Blue BAN..... Azidine Blue 24574..... Renol Blue B extra..... Renol Blue B conc..... Benzaurine G conc.....	By K K BK CG CJ CJ CJ CJ CJ tM tM S		
411	<b>BENZAZURINE 3 G.....</b> 1885 Sodium salt of dimethoxy-diphenyl-disazo-bi- $\alpha$ -naphthol-5-sulphonic acid.	By	0	
412	<b>CONGO BLUE 2 B.....</b> 1890 Sodium salt of dimethoxy-diphenyl-disazo- $\alpha$ -naphthol-4-sulphonic- $\beta$ -naphthol-3,6-disulphonic acid.	By	0	
413	<b>DIRECT VIOLET BB.....</b> 1894 Sodium salt of dimethoxy-diphenyl-disazo-m-tolylene-diamine-dioxy-naphthalene-sulphonic acid.  $[I] \left\{ \begin{array}{l} C_6H_5 \left\{ \begin{array}{l} [4]-N_2-[4]C_6H_2 \left\{ \begin{array}{l} [1]NH_2 \\ [3]NH_2 \end{array} \right. \\ [3]OCH_3 \left\{ \begin{array}{l} [6]CH_3 \\ [1]OH \end{array} \right. \\ C_6H_5 \left\{ \begin{array}{l} [4]-N_2-[2]C_6H_4 \left\{ \begin{array}{l} [7]OH \\ [4]SO_2Na \end{array} \right. \end{array} \right. \end{array} \right.$	I	0	
413a	<b>DIRECT VIOLET (V. M.).....</b> Direct Violet 12932 (S. H. IV, 1739)..... Direct Violet 18510..... Direct Violet RR..... Direct Violet RR conc. 7:10..... Direct Violet B.....	I I S S H	4,396	\$1,231
414	<b>INDAZURINE B.....</b> 1894 Sodium salt of dimethoxy-diphenyl-disazo- $\beta$ -naphthol-3,6-disulphonic-1,7-dioxy-naphthalene-4-sulphonic acid.	I	0	
415	<b>DIANIL BLUE G.....</b> 1890 Sodium salt of dimethoxy-diphenyl-disazo-bi-chromotropic acid.	M	0	
416	<b>BRILLIANT AZURINE 5 G.....</b> 1889 Sodium salt of dimethoxy-diphenyl-disazo-bi-dioxy-naphthalene-sulphonic acid.  $[I] \left\{ \begin{array}{l} C_6H_5 \left\{ \begin{array}{l} [3]OCH_3 \\ [4]-N=N-C_{10}H_4 \left\{ \begin{array}{l} [1]OH \\ [3]OH \\ [4]SO_2Na \\ [2]SO_2Na \end{array} \right. \\ C_6H_5 \left\{ \begin{array}{l} [4]-N=N-C_{10}H_4 \left\{ \begin{array}{l} [3]OH \\ [1]OH \end{array} \right. \end{array} \right. \end{array} \right.$	By	18,395	
416a	<b>BRILLIANT AZURINE (V. M.).....</b> Brilliant Azurine B (S.; S. H. IV, 1633)..... Brilliant Azurine R (S.; S. H. IV, 1649)..... Brilliant Azurine 5 R (S.; S. H. IV, 1651).....	By By By	3,323	650
417	<b>CHLORAZOL BLUE.....</b> 1898 Dimethoxy-diphenyl-disazo-bi-chloro- $\alpha$ -naphthol-sulphonic acid.  $[I] \left\{ \begin{array}{l} C_6H_5 \left\{ \begin{array}{l} [3]OCH_3 \\ [4]-N_2-C_{10}H_4Cl \left\{ \begin{array}{l} [1]OH \\ [5]SO_2Na \end{array} \right. \\ C_6H_5 \left\{ \begin{array}{l} [4]-N_2-C_{10}H_4Cl \left\{ \begin{array}{l} [1]OH \\ [5]SO_2Na \end{array} \right. \end{array} \right. \end{array} \right.$		2,945	556
	Chlorazol Blue GBDS..... Chlorazol Blue R 5 per cent.....	H H		



## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
417a	CHLORAZOL BRILLIANT BLUE (V. M.)..... Chlorazol Brilliant Blue 10 B extra..... Chlorazol Brilliant Blue 3 B..... Chlorazol Brilliant Blue 14 B (Kal. 1908)..... Chlorazol Brilliant Blue F.....	H H H H	7,303	\$1,878
418	DIAMINE BRILLIANT BLUE G.....1893 Sodium salt of dimethoxy-diphenyl-disazo-bi-8.1-chloro-naphthol-disulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N}_2 - [2] \text{C}_6\text{H}_5 \\ [3] \text{OCH}_3 \end{array} \right. \left\{ \begin{array}{l} [1] \text{OH} \\ [3] \text{SO}_2\text{Na} \\ [6] \text{SO}_2\text{Na} \\ [8] \text{Cl} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{OCH}_3 \\ [4] - \text{N}_2 - [2] \text{C}_6\text{H}_5 \end{array} \right. \left\{ \begin{array}{l} [8] \text{Cl} \\ [6] \text{SO}_2\text{Na} \\ [3] \text{SO}_2\text{Na} \\ [1] \text{OH} \end{array} \right. \end{array} \right.$	C	11,582	
419	CHICAGO BLUE RW.....1894 Sodium salt of dimethoxy-diphenyl-disazo-8-naphthol-1.8-amido-naphthol-2.4-disulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N}_2 - [1] \text{C}_6\text{H}_4 [2] \text{OH} \\ [3] \text{OCH}_3 \end{array} \right. \left\{ \begin{array}{l} [1] \text{NH}_2 \\ [3] \text{OH} \\ [2] \text{SO}_2\text{Na} \\ [4] \text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{OCH}_3 \\ [4] - \text{N}_2 - [7] \text{C}_6\text{H}_5 \end{array} \right. \left\{ \begin{array}{l} [1] \text{NH}_2 \\ [3] \text{OH} \\ [2] \text{SO}_2\text{Na} \\ [4] \text{SO}_2\text{Na} \end{array} \right. \end{array} \right.$ Chicago Blue RW..... Benzo Blue RW.....	A By	15,178	
420	AZIDINE WOOL BLUE B.....1906 Sodium salt of dimethoxy-diphenyl-disazo-2-naphthol-8-sulphonic-1.8-amido-naphthol-4-sulphonic acid.	CJ	0	
421	OXAMINE BLUE B.....1893 Sodium salt of dimethoxy-diphenyl-disazo-α-naphthol-sulphonic-amido-naphthol-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N}_2 - [2] \text{C}_6\text{H}_5 \\ [3] \text{OCH}_3 \end{array} \right. \left\{ \begin{array}{l} [1] \text{OH} \\ [4] \text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{OCH}_3 \\ [4] - \text{N}_2 - [6] \text{C}_6\text{H}_5 \end{array} \right. \left\{ \begin{array}{l} [1] \text{NH}_2 \\ [5] \text{OH} \\ [7] \text{SO}_2\text{Na} \end{array} \right. \end{array} \right.$	B	14,001	
421a	OXAMINE BLUE (V. M.)..... Oxamine Blue 3 B (S.; S. H. IV, 1645).....1900 Oxamine Blue BG (S. 1901)..... Oxamine Blue GNX (S.; Kal. 1908)..... Oxamine Blue 3 R (R. 29, preparation).....	B B B B	21,800	2,769
422	CHICAGO BLUE 4 B.....1894 Sodium salt of dimethoxy-diphenyl-disazo-1.8-amido-naphthol-2.4-disulphonic-1.8-amido-naphthol-4-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N}_2 - [7] \text{C}_6\text{H}_5 \\ [3] \text{OCH}_3 \end{array} \right. \left\{ \begin{array}{l} [1] \text{NH}_2 \\ [3] \text{OH} \\ [2] \text{SO}_2\text{Na} \\ [4] \text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{OCH}_3 \\ [4] - \text{N}_2 - [7] \text{C}_6\text{H}_5 \end{array} \right. \left\{ \begin{array}{l} [1] \text{NH}_2 \\ [3] \text{OH} \\ [2] \text{SO}_2\text{Na} \\ [4] \text{SO}_2\text{Na} \end{array} \right. \end{array} \right.$	A	4,453	
422a	CHICAGO BLUE new.....	A	2,316	
423	CHICAGO BLUE B.....1893 Sodium salt of dimethoxy-diphenyl-disazo-bi-1.8-amido-naphthol-4-sulphonic acid.	A	0	
424	CHICAGO BLUE 6 B.....1894 Sodium salt of dimethoxy-diphenyl-disazo-bi-amido-naphthol-disulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N}_2 - [7] \text{C}_6\text{H}_5 \\ [3] \text{OCH}_3 \end{array} \right. \left\{ \begin{array}{l} [1] \text{NH}_2 \\ [3] \text{OH} \\ [2] \text{SO}_2\text{Na} \\ [4] \text{SO}_2\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{OCH}_3 \\ [4] - \text{N}_2 - [7] \text{C}_6\text{H}_5 \end{array} \right. \left\{ \begin{array}{l} [1] \text{NH}_2 \\ [3] \text{OH} \\ [2] \text{SO}_2\text{Na} \\ [4] \text{SO}_2\text{Na} \end{array} \right. \end{array} \right.$		116,560	\$2,417

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
424	CHICAGO BLUE—Continued. Chicago Blue 6 B..... Chicago Blue 6 B 85089..... Oxamine Pure Blue 6 BXX conc..... Brilliant Benzo Blue 6 B..... Brilliant Benzo Blue 6 B conc. 27758..... Azidine Sky Blue FF conc.....	A A B By By CJ		
424a	DIANOL BLUE 402.....	Lev	500	
424b	DIANOL BRILLIANT BLUE G.....	Lev	1,482	
425	BENZO CYANINE 3 B.....1895 Sodium salt of dimethoxy-diphenyl-disazo-1,8-amido-naphthol-3,6-disulphonic-1,8-amido-naphthol-4-sulphonic acid.	By	1,001	
	$[1] \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [4]-\text{N}_2-[7]\text{C}_{10}\text{H}_7 \\ [3]\text{OCH}_3 \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{OCH}_3 \\ [4]-\text{N}_2-[7]\text{C}_{10}\text{H}_7 \end{Bmatrix} \end{array} \begin{array}{l} \begin{Bmatrix} [1]\text{NH}_2 \\ [8]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{Bmatrix} \\ \begin{Bmatrix} [1]\text{NH}_2 \\ [8]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{Bmatrix} \end{array}$			
426	BENZAMINE PURE BLUE.....1890 Sodium salt of dimethoxy-diphenyl-disazo-bi-amido-naphthol-disulphonic acid.		12,381	\$5,043
	$[1] \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{OCH}_3 \\ [4]-\text{N}=\text{N} \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} [4]-\text{N}=\text{N} \\ [3]\text{OCH}_3 \end{Bmatrix} \end{array} \begin{array}{l} \begin{Bmatrix} [1]\text{NH}_2 \\ [8]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \\ [9]\text{SO}_2\text{Na} \\ [8]\text{OH} \\ [1]\text{NH}_2 \end{Bmatrix} \end{array}$			
	Benzo Sky Blue..... Benzamine Pure Blue extra conc.....	By WD		
427	INDAZURINE GM.....1894 Sodium salt of dimethoxy-diphenyl-disazo-1,7-dioxy-2-naphthol-4-sulphonic- $\alpha$ -naphthol-4-sulphonic acid.	I	0	
428	DIRECT BLUE B.....1891 Sodium salt of dimethoxy-diphenyl-disazo-1,7-dioxy-6-naphthol-3-sulphonic- $\alpha$ -naphthol-4-sulphonic acid.	I	0	
	$[1] \begin{array}{c} \text{C}_6\text{H}_5 \begin{Bmatrix} [3]\text{OCH}_3 \\ [4]-\text{N}=\text{N}-\text{C}_{10}\text{H}_7(\text{OH})_2(\text{CO}_2\text{Na}) \end{Bmatrix} \\ \text{C}_6\text{H}_5 \begin{Bmatrix} [4]-\text{N}=\text{N}-\text{C}_{10}\text{H}_7(\text{OH})_2(\text{SO}_2\text{Na}) \\ [3]\text{OCH}_3 \end{Bmatrix} \end{array}$			
428a	DIRECT BLUE (V. M.)..... Direct Blue GN 250 per cent..... Direct Blue C conc..... Direct Blue G..... Direct Blue BX..... Direct Blue 3 B..... Direct Blue RW..... Direct Blue 30..... Direct Blue 13503..... Direct Blue 13108..... Direct Blue 3 G..... Direct Blue 7079..... Direct Blue 51096..... Direct Blue (for black) 20 per cent..... Direct Blue AB..... Direct Blue 5 B (bluish) red.....	CG AW AW I I I I I I S CV H H Q Q	21,322	5,306
428b	DIRECT BRILLIANT BLUE 8 B (Kal. 1913).....	I	99	
429	INDAZURINE BB.....1894 Sodium salt of dimethoxy-diphenyl-disazo-1,7-dioxy-2-naphthol-4-sulphonic- $\beta$ -naphthol-3,6-disulphonic acid.	I	0	
430	INDAZURINE 5 GM.....1894 Sodium salt of dimethoxy-diphenyl-disazo-1,7-dioxy-2-naphthol-4-sulphonic-1,8-amido-naphthol-3,6-disulphonic acid.	I	0	

## V. AZO COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
421	DIAMINE GOLD.....1890 Sodium salt of disulphonaphthylene-diazo-phenetol-phenol. $\text{C}_{20}\text{H}_{14}\left\{\begin{array}{l} [1]\text{N}=\text{N}[1]\text{C}_6\text{H}_4[4]\text{OC}_2\text{H}_5 \\ [3]\text{SO}_2\text{Na} \\ [7]\text{SO}_2\text{Na} \\ [5]\text{N}=\text{N}[1]\text{C}_6\text{H}_4[4]\text{OH} \end{array}\right.$	C	0	
422	DIAMINE CUTCH.....1890 Sodium salt of disulphonaphthylene-diazo-bi- $\alpha$ -naphthyl-amine. $\text{C}_{20}\text{H}_{14}\left\{\begin{array}{l} [1]\text{N}=\text{N}[4]\text{C}_{10}\text{H}_7[1]\text{NH}_2 \\ [3]\text{SO}_2\text{Na} \\ [7]\text{SO}_2\text{Na} \\ [5]\text{N}=\text{N}[4]\text{C}_{10}\text{H}_7[1]\text{NH}_2 \end{array}\right.$	C	200	
423	COOMASSIE BLACK B.....1895 Sodium salt of 2-sulphonaphthylene-diazo- $\beta$ -naphthylamine- $\beta$ -naphthol-3,6-disulphonic acid.	Lev	0	
424	COOMASSIE NAVY BLUE.....1895 Sodium salt of 2-sulphonaphthylene-diazo- $\beta$ -naphthol- $\beta$ -naphthol-3,6-disulphonic acid.	Lev	0	

## C. TRISAZO COLORS.

(a) Type: $\text{R} \rightarrow \text{K} \left\{ \begin{array}{l} \text{R}^1 \\ \text{K}^1 \end{array} \right\}$ (R and R <sup>1</sup> represent diazo compounds.)				
425	JANUS BROWN B.....1896 Diazotised m-amino-phenyl-trimethyl-ammonium chloride is combined with $\alpha$ -naphthylamine; the product is diazotised and combined with chrysoidine. $\text{N}(\text{CH}_3)_3\text{Cl} \cdot \text{C}_6\text{H}_4 \cdot \text{N}_2 \cdot \text{C}_{10}\text{H}_7 \cdot \text{N}_2 \cdot \text{C}_6\text{H}_4(\text{NH}_2)_2 \cdot \text{N}_2 \cdot \text{C}_6\text{H}_5$	M	0	
(b) Type: $\text{R} \left\{ \begin{array}{l} \text{K} \\ \text{K}^1 - \text{K}^2 \end{array} \right\}$ (R represents a diamine. After diazotisation and combination with K and K <sup>1</sup> the latter component is diazotised and combined with K <sup>2</sup> .)				
426	COLUMBIA BLACK.....1896 Sodium salt of benzene-diazo- $\alpha$ -naphthylamine-sulphonic-acid-1-naphthol-6-sulphonic-acid-azo-m-phenylene-diamine. $\text{C}_6\text{H}_4\left\{\begin{array}{l} [1]\text{N}_2-[4]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{NH}_2 \\ [6]\text{or}[7]\text{SO}_2\text{Na} \\ [8]\text{OH} \end{array}\right. \\ [4]\text{N}_2-[7]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [2]-\text{N}_2-[4]\text{C}_6\text{H}_4\left\{\begin{array}{l} [1]\text{NH}_2 \\ [3]\text{NH}_2 \end{array}\right. \\ [6]\text{SO}_2\text{Na} \end{array}\right. \end{array}\right.$	.....	290,902	\$41,543
Columbia Black FB.....		A		
Columbia Black FB strong 50:100.....		A		
Columbia Black F 2 B conc.....		A		
Columbia Black FF.....		A		
Columbia Black FF extra.....		A		
Columbia Black FF extra conc.....		A		
Columbia Black FF extra strong.....		A		
Columbia Black FF extra H.....		A		
Columbia Black FF extra J.....		A		
Columbia Black FF extra M.....		A		
Columbia Black FF extra S.....		A		
Columbia Black FF extra, new.....		A		
426a	DIANOL BLACK.....	.....	112,095	12,635
Dianol Black BH.....		Lev		
Dianol Black E.....		Lev		
Dianol Black EX.....		Lev		
Dianol Black extra.....		Lev		
Dianol Black extra conc.....		Lev		
Dianol Black 4500.....		Lev		
Dianol Black 4534.....		Lev		
Dianol Black 6100.....		Lev		

## C. TRISAZO COLORS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
436a	DIANOL BLACK—Continued. Dianol Black 6312..... Dianol Black 6400..... Dianol Black 6525.....	Lev Lev Lev		
437	ISODIPHENYL BLACK.....1897 Sodium salt of benzene-disazo-8-naphthol-6-sulphonic acid-azo- m-phenylene-diamine-resorcin.	G	0	
438	MELOGENE BLUE BH.....1896 Sodium salt of diphenyl-disazo-p-xylene-azo-bi-1.8-amido- naphthol-3.6-disulphonic acid.	S	0	
439	DIRECT INDIGO BLUE A.....1893 Sodium salt of diphenyl-disazo-cresol-ether-azo-amido-naph- thol-disulphonic-amidophenol-disulphonic acid.	I	0	
440	DIRECT INDIGO BLUE BK.....1893 Sodium salt of diphenyl-disazo-cresol-ether-azo-bi-2.8-amido- naphthol-6-sulphonic acid.	I	0	
441	DIAZO BLUE BLACK RS.....1892 Sodium salt of diphenyl-disazo-1.8-amido-naphthol-3.6-sulphonic- α-naphthalene-azo-1.8-amido-naphthol-3.6-sulphonic acid.	By	0	
442	DIRECT BLACK V.....1896 Sodium salt of diphenyl-disazo-naphthol-disulphonic-azo-α- naphthylamine-amido-naphthol-sulphonic acid.	S	0	
	$  \begin{array}{c}  \text{C}_6\text{H}_4[4]-\text{N}_2-[7]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} [3]\text{OH} \\ [6]\text{SO}_2\text{Na} \\ [3]\text{SO}_2\text{Na} \\ [2]-\text{N}_2-[4]\text{C}_{10}\text{H}_6[1]\text{NH}_2 \\ [2]\text{NH}_2 \\ [3]\text{OH} \\ [6]\text{SO}_2\text{Na} \end{array} \right. \\  [1] \left  \begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}_2-[7]\text{C}_6\text{H}_3 \end{array} \right.  \end{array}  $			
442a	DIRECT BLACK (V. M.)..... Direct Black 3 G..... Direct Black RO conc 4 : 10..... Direct Black 33336..... Direct Black 7565..... Direct Black 58219..... Direct Black 64501..... Direct Black 65450..... Direct Black 70823..... Direct Black D.....	S S S CV H H H H Q	145, 738	\$11, 631
443	DIRECT INDONE BLUE R.....1896 Sodium salt of diphenyl-disazo-8-naphthol-3.6-disulphonic- azo-α-naphthylamine-1.8-amido-naphthol-3.6-disulphonic acid.	S	0	
444	CRUMPSALL DIRECT FAST BROWN B.....1895 Sodium salt of diphenyl-disazo-benzene-azo-2.8-amido-naph- thol-6-sulphonic-salicylic acid.	Lev	0	
445	CRUMPSALL DIRECT FAST BROWN O.....1895 Sodium salt of diphenyl-disazo-benzene-azo-2-phenyl-amido-8- naphthol-6-sulphonic-salicylic acid.	Lev	0	
446	BENZO OLIVE.....1891 Sodium salt of diphenyl-disazo-α-naphthalene-azo-amido-naph- thol-disulphonic-salicylic acid.	By	1, 169	
	$  \begin{array}{c}  \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_{10}\text{H}_6[1]-\text{N}_2-[7]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} [1]\text{NH}_2 \\ [3]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{array} \right. \\  [1] \left  \begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} [1]\text{OH} \\ [2]\text{CO}_2\text{Na} \end{array} \right. \end{array} \right.  \end{array}  $			
447	BENZO GRAY S extra.....1890 Sodium salt of diphenyl-disazo-α-naphthalene-azo-α-naphthol- sulphonic-salicylic acid.	By	908	
	$  \begin{array}{c}  \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_{10}\text{H}_6[1]-\text{N}_2-[2]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} [1]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array} \right. \\  [1] \left  \begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} [1]\text{OH} \\ [2]\text{CO}_2\text{Na} \end{array} \right. \end{array} \right.  \end{array}  $			

## C. TRIBAZO COLORS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
448	DIAMINE BRONZE R 431. (Current marks, B. G.).....1891 Sodium salt of diphenyl-disazo-naphthol-disulphonic-azo-m-phenylene-diamine-salicylic acid. $\begin{array}{c} \text{C}_6\text{H}_4(4)-\text{N}_2-[7]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (6)\text{SO}_3\text{Na} \\ (3)\text{SO}_3\text{Na} \\ (8)\text{OH} \end{array} \right. \\ [1] \left\{ \begin{array}{l} (1)-\text{N}_2-(4)\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (1)\text{NH}_2 \\ (3)\text{NH}_2 \end{array} \right. \\ (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{array} \right. \\ \text{C}_6\text{H}_4(4)-\text{N}_2-[4]\text{C}_6\text{H}_5 \end{array}$	C	4,495	
449	TRISULPHON BROWN.....1897 Sodium salt of diphenyl-disazo-naphthol-disulphonic-azo-m-phenylene-diamine-salicylic acid. $\begin{array}{c} \text{C}_6\text{H}_4(4)-\text{N}_2-[7]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (6)\text{SO}_3\text{Na} \\ (3)\text{SO}_3\text{Na} \\ (8)\text{OH} \end{array} \right. \\ [1] \left\{ \begin{array}{l} (2)-\text{N}_2-(4)\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (1)\text{NH}_2 \\ (3)\text{NH}_2 \end{array} \right. \\ (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{array} \right. \\ \text{C}_6\text{H}_4(4)-\text{N}_2-[4]\text{C}_6\text{H}_5 \end{array}$ Trisulphon Brown A..... Trisulphon Brown B..... Trisulphon Brown B conc..... Trisulphon Brown B extra conc. 55 : 100..... Trisulphon Brown B conc. 5 : 10..... Trisulphon Brown MB conc.....	-----	16,781	\$5,255
450	BENZO BLACK BLUE R.....1887 Sodium salt of ditolyl-disazo- $\alpha$ -naphthalene-azo-bi- $\alpha$ -naphthol-4-sulphonic acid.	By	0	
451	CONGO FAST BLUE.....1890 Sodium salt of ditolyl-disazo- $\alpha$ -naphthalene-azo-bi- $\alpha$ -naphthol-disulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} (3)\text{CH}_3 \\ (4)-\text{N}_2-(4)\text{C}_6\text{H}_4(1)-\text{N}_2-[2]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (1)\text{OH} \\ (3)\text{SO}_3\text{Na} \\ (8)\text{SO}_3\text{Na} \end{array} \right. \\ [1] \left\{ \begin{array}{l} (3)\text{CH}_3 \\ (4)-\text{N}_2-[2]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (1)\text{OH} \\ (3)\text{SO}_3\text{Na} \\ (8)\text{SO}_3\text{Na} \end{array} \right. \end{array} \right. \end{array}$ Congo Fast Blue R extra..... Benzo Fast Blue R.....	A A	4,449	1,635
452	BENZO INDIGO BLUE.....1891 Sodium salt of ditolyl-disazo- $\alpha$ -naphthalene-azo-bi-1,8-dioxy-naphthalene-4-sulphonic acid.	By	0	
453	COLUMBIA BLACK R.....1893 Sodium salt of ditolyl-disazo-8-naphthol-3,6-disulphonic acid-azo-bi-m-toluylene-diamine.	A	1,397	
454	TRISULPHON BROWN G..... Sodium salt of ditolyl-disazo-naphthol-disulphonic-azo-m-phenylene-diamine-salicylic acid. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} (3)\text{CH}_3 \\ (4)-\text{N}_2-[7]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (6)\text{SO}_3\text{Na} \\ (3)\text{SO}_3\text{Na} \\ (8)\text{OH} \end{array} \right. \\ [1] \left\{ \begin{array}{l} (2)-\text{N}_2-(4)\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (1)\text{NH}_2 \\ (3)\text{NH}_2 \end{array} \right. \\ (1)\text{OH} \\ (2)\text{CO}_2\text{Na} \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} (3)\text{CH}_3 \\ (4)-\text{N}_2-[4]\text{C}_6\text{H}_5 \end{array} \right. \end{array}$	S	1,323	
455	DIRECT BLUE BLACK.....1893 Sodium salt of dimethoxy-diphenyl-disazo-naphthol-disulphonic-azo-bi-m-toluylene-diamine. $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} (3)\text{OCH}_3 \\ (4)-\text{N}_2-[7]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (6)\text{SO}_3\text{Na} \\ (3)\text{SO}_3\text{Na} \\ (8)\text{OH} \end{array} \right. \\ [1] \left\{ \begin{array}{l} (2)-\text{N}_2-(4)\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (1)\text{NH}_2 \\ (3)\text{NH}_2 \end{array} \right. \\ (1)\text{NH}_2 \\ (6)\text{CH}_3 \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} (3)\text{OCH}_3 \\ (4)-\text{N}_2-[4]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} (1)\text{NH}_2 \\ (3)\text{NH}_2 \end{array} \right. \end{array} \right. \end{array}$ Columbia Black B..... Direct Blue Black B.....	A By	7,191	1,361

## C. TRISAZO COLORS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
455a	COLUMBIA BLACK (V. M.)..... Columbia Black EA extra conc. (S.; S. H. IV, 1830-32)..... 1902 Columbia Black EA extra conc. 40:100..... Columbia Black EA extra conc..... Columbia Black WA extra extra 55:100 (S.; S. H. IV, 1832)..... 1902	A A A A	142,866	\$36,125
455b	DIRECT BLUE BLACK 313.....	Lev	14,530	
456	BENZO FAST BLUE..... 1890 Sodium salt of dimethoxy-diphenyl-disazo- $\alpha$ -naphthalene-azo- bi- $\alpha$ -naphthol-disulphonic acid.  $[1] \begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{OCH}_3 \\ [4] - \text{N}_2 - [4] \text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} [1] \text{OH} \\ [3] \text{SO}_2\text{Na} \end{array} \right. \\ [3] \text{OCH}_3 \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{OCH}_3 \\ [4] - \text{N}_2 - [2] \text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} [1] \text{OH} \\ [3] \text{SO}_2\text{Na} \end{array} \right. \\ [3] \text{OCH}_3 \end{array} \right. \end{array}$ Congo Fast Blue B extra..... Benzo Fast Blue B..... Benzo Fast Blue BN (S.; S. H. IV, 1654)..... 1900	A By By	72,326	20,607
456a	BENZO FAST BLUE (V. M.)..... Benzo Fast Blue FRL (Kal. 1911)..... Benzo Fast Blue 2 GL (Kal. 1913)..... Benzo Fast Blue 4 GL..... Benzo Fast Blue 2 L.....	By By By By By	26,559	8,429
457	TRISULPHON BROWN GG..... 1879 Sodium salt of dimethoxy-disazo-naphthol-disulphonic-azo-m- phenylene-diamine-sullicylic acid.  $[1] \begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N}_2 - [4] \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [1] \text{OH} \\ [2] \text{CO}_2\text{Na} \end{array} \right. \\ [3] \text{OCH}_3 \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [3] \text{OCH}_3 \\ [4] - \text{N}_2 - [7] \text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} [1] \text{OH} \\ [3] \text{SO}_2\text{Na} \end{array} \right. \\ [3] \text{OCH}_3 \end{array} \right. \end{array}$	S	7,562	
458	CARBON BLACK (V. M.); NAPHTHAMINE DIRECT BLACK (V. M.)..... 1899 Sulpho-p-phenylene-diamine is diazotised and combined with $\alpha$ -naphthylamine-sulphonic acid, and a diamine; the product is diazotised and combined with a second diamine.	K	0	
459	BENZO BLACK BLUE G..... 1887 Sodium salt of disulpho-diphenyl-disazo- $\alpha$ -naphthalene-azo- bi- $\alpha$ -naphthol-4-sulphonic acid.	By	0	
460	BENZO BLACK BLUE 5 G..... 1892 Sodium salt of disulpho-diphenyl-disazo- $\alpha$ -naphthalene-azo- bi-dioxynaphthalene-sulphonic acid.  $[1] \begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [\text{SO}_2\text{Na}] \\ [4] - \text{N}_2 - [4] \text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} [1] \text{OH} \\ [8] \text{OH} \end{array} \right. \\ [3] \text{OCH}_3 \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [4] - \text{N}_2 - [2] \text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} [1] \text{OH} \\ [8] \text{OH} \end{array} \right. \\ [\text{SO}_2\text{Na}] \end{array} \right. \end{array}$	By	602	
461	COOMASSIE UNION BLACKS..... 1896 Sodium salt of 3-sulpho-naphthalene-disazo-8,6-naphthol-sul- phonic-acid-azo-bi-m-phenylene-diamine (or m-toluylene diamine, or resorcin).  (c) Type: $\begin{cases} \text{R-K} \\ \text{R}^1 - \text{K}^1 \end{cases}$ (R represents a dianiline; R <sup>1</sup> , a monamine.)	Lev	0	
462	DIRECT DEEP BLACK EW..... 1901 Sodium salt of diphenyl-disazo-m-phenylene-diamine-disul- pho-amido-naphthol-azo-benzene.  $[1] \begin{array}{c} \text{C}_6\text{H}_4[4] - \text{N}_2 - [4] \text{C}_6\text{H}_5 \left\{ \begin{array}{l} [1] \text{NH}_2 \\ [3] \text{NH}_2 \end{array} \right. \\ \text{C}_6\text{H}_4[4] - \text{N}_2 - [1] \text{NH}_2 \\ \text{C}_6\text{H}_4[4] - \text{N}_2 - [1] \text{NH}_2 \\ \text{C}_6\text{H}_4[4] - \text{N}_2 - [1] \text{NH}_2 \end{array}$		22,820	5,022

## C. TRIBAZO COLORS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
462	DIRECT DEEP BLACK—Continued. Cotton Black RW extra conc. Direct Deep Black EW extra. Direct Deep Black EW extra 26685.	B By By		
462a	DIRECT DEEP BLACK E. Direct Deep Black E (S. H. IV, 1857; R. 62).....1898 Direct Deep Black E extra (S. H. IV, 1857; R. 62)..... Direct Deep Black E extra 25915..... Direct Deep Black E extra 25906..... Direct Deep Black E extra 27405..... Direct Deep Black E extra conc..... Direct Deep Black E extra conc. 23393..... Direct Deep Black E extra conc. 27469.....	By By By By By By By By	863, 601	\$110, 008.
462b	RENOL BLACK. Renol Black BHN..... Renol Black SF extra (Kal. 1911)..... Renol Black ST extra double conc.....	tM tM tM	7, 198	1, 635.
462c	COTTON BLACK (V. M.)..... Cotton Black..... Cotton Black GS..... Cotton Black RS..... Cotton Black CC..... Cotton Black CT..... Cotton Black V paste..... Cotton Black Y..... Cotton Black BT..... Cotton Black extra 180..... Cotton Black 1792.....	S S S Lev Lev Lev Lev Q Q Q	91, 485	23, 206.
462d	UNION BLACK (V. M.)..... Union Black SOJ..... Union Black OO 510. (Current mar.s, A, B, BB, BG, P, S.).. Union Black BRN.....	A C S	61, 218	9, 044
462e	UNION ACID BLACK (V. M.)..... Union Acid Black BH..... Union Acid Black GH.....	H H	100	20
462f	CARBIDE BLACK (V. M.)..... Carbide Black E..... Carbide Black EX (S. H. IV, 1924)..... Carbide Fast Black GF (Kal. 1914)..... Carbide Black SX (S. 1911)..... Carbide Black conc. 4069.....	I I I I I I	190, 304	31, 607
462g	CARBIDE VIOLET V.....	I	800	
463	COTTON BLACK E.....1901 Sodium salt of diphenyl-disazo-m-toluyene-diamine-disulpho- amido-naphthol-azo-benzene. $\begin{array}{c} \text{C}_6\text{H}_4(4)-\text{N}_2-[4]\text{C}_6\text{H}_5 \left\{ \begin{array}{l} [1]\text{NH}_2 \\ 3\text{NH}_2 \\ 6\text{CH}_3 \end{array} \right. \\ [1] \\ \text{C}_6\text{H}_4(4)-\text{N}_2- \left\{ \begin{array}{l} 6\text{SO}_2\text{Na} \\ 3\text{SO}_2\text{Na} \\ 8\text{OH} \\ 1\text{NH}_2 \end{array} \right. \\ \text{C}_6\text{H}_5-\text{N}_2- \end{array}$ Cotton Black F extra..... Cotton Black E extra conc..... Direct Deep Black RW extra..... Direct Deep Black RW extra conc.....	B B By By	248, 567	34, 603.
464	ERIE DIRECT GREEN ET.....1901 Sodium salt of diphenyl-disazo-phenol-3,6-disulpho-1,8-amido- naphthol-azo-benzene.	Sch	0	
465	COLUMBIA BLACK GREEN D..... Sodium salt of diphenyl-disazo-salicylic-4-sulpho-1,8-amido- naphthol-azo-benzene.	A	0	
466	EBOLI GREEN (V. M.).....1895 Sodium salt of diphenyl-disazo-salicylic-3-sulpho-1,7-amido- naphthol-azo-4-sulpho-benzene.	L	0	

## C. TRISAZO COLORS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
467	DIPHENYL GREEN G.....1898 Sodium salt of diphenyl-disazo-phenol-3,6-disulpho-1,8-amido- naphthol-azo-chloronitrobenzene.	G	0	
468	DIPHENYL GREEN 3 G.....1898 Sodium salt of diphenyl-disazo-salicylic-3,6-disulpho-1,8-amido- naphthol-azo-chloronitrobenzene.	G	0	
469	CHLORAMINE BLACK N conc..... Sodium salt of diphenyl-disazo-m-phenylene-diamine-3,6- disulpho-1,8-amido-naphthol-azo-dichloro-benzene.	S	20,085	
	$  \begin{array}{c}  \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_6\text{H}_3 \begin{cases} [1]\text{NH}_2 \\ [3]\text{NH}_2 \end{cases} \\  [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4[4]-\text{N}_2- \\ \text{C}_6\text{H}_3\text{Cl}_2-\text{N}_2- \end{array} \right\} \text{C}_{10}\text{H}_7 \begin{cases} [1]\text{NH}_2 \\ [8]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{cases}  \end{array}  $			
469a	CHLORAMINE BLACK (V. M.)..... Chloramine Black EXD conc. powder..... Chloramine Black FF conc. powder.....	S S	13,505	\$3,951
470	CHLORAMINE GREEN B.....1898 Sodium salt of diphenyl-disazo-phenol-disulpho-amido-naph- thol-azo-dichloro-benzene.		198	74
	$  \begin{array}{c}  \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_6\text{H}_4[1]\text{OH} \\  [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4[4]-\text{N}_2- \\ \text{C}_6\text{H}_3\text{Cl}_2-\text{N}_2- \end{array} \right\} \text{C}_{10}\text{H}_7 \begin{cases} [1]\text{NH}_2 \\ [8]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{cases}  \end{array}  $			
	Chloramine Green B.....	S		
	Chloramine Green B conc. 5:10.....	S		
470a	CHLORAMINE DARK GREEN B.....	S	1,477	
471	CHLORAMINE BLUE 3 G.....1899 Sodium salt of diphenyl-disazo-1,8-amido-naphthol-3,6-sul- phonio-3,6-sulpho-1,8-amido-naphthol-azo-dichloro-benzene.	S	132	
	$  \begin{array}{c}  \text{C}_6\text{H}_4[4]-\text{N}_2-[7]\text{C}_{10}\text{H}_7 \begin{cases} [1]\text{NH}_2 \\ [8]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{cases} \\  [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4[4]-\text{N}_2- \\ \text{C}_6\text{H}_3\text{Cl}_2-\text{N}_2- \end{array} \right\} \text{C}_{10}\text{H}_7 \begin{cases} [1]\text{NH}_2 \\ [8]\text{OH} \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{cases}  \end{array}  $			
471a	CHLORAMINE BLUE 3 B (Kal. 1907).....	S	55	
471b	CHLORAMINE PURE BLUE conc. 5:10 (S.).....	S	99	
472	CHLORAMINE BLUE HW.....1899 Sodium salt of diphenyl-disazo-2,8-amido-naphthol-6-sul- phonio-3,6-disulpho-1,8-amido-naphthol-azo-dichloro-benzene.	S	0	
473	DIAMINE BLACK HW.....1891 Sodium salt of diphenyl-disazo-6-sulpho-2,8-amido-naphthol- 3,6-disulpho-1,8-amido-naphthol-azo-nitrobenzene.	C	0	
474	OXAMINE GREEN B.....1891 Sodium salt of diphenyl-disazo-phenol-disulpho-amido-naph- thol-azo-nitrobenzene.		23,832	\$ 134
	$  \begin{array}{c}  \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_6\text{H}_4[1]\text{OH} \\  [1] \left\{ \begin{array}{l} \text{C}_6\text{H}_4[4]-\text{N}_2- \\ \text{C}_6\text{H}_3\text{Cl}_2-\text{N}_2- \\ \text{C}_6\text{H}_4[1]-\text{NO}_2 \end{array} \right\} \text{C}_{10}\text{H}_7 \begin{cases} [1]\text{OH} \\ [8]\text{NH}_2 \\ [3]\text{SO}_2\text{Na} \\ [6]\text{SO}_2\text{Na} \end{cases}  \end{array}  $			
	Oxamine Green BX.....	B		
	Renol Green B extra conc.....	tM		
	Dianol Green B.....	Lev		



## C. TRISAZO COLORS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
474a	DIAMINE GREEN (V. M.)..... Diamine Green P 423 (S.; Kal. 1914; R. 62). (Current marks, B, G, CL, G, HS, N.A.)..... Diamine Green S 425 (P)..... Diamine Green 21 Y 1103 (P).....	C C C	53,268	\$8,318
475	OXAMINE GREEN GX (for paper).....1801 Sodium salt of diphenyl-disazo-salicylic-disulpho-amido-naphthol-azo-nitrobenzene. $\begin{array}{c} \text{C}_6\text{H}_4(4)-\text{N}_2-[4]\text{C}_6\text{H}_3(\text{OH})\text{CO}_2\text{Na} \\ [1] \left  \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2-[4] \left\{ \begin{array}{l} 1\text{NH}_2 \\ 8\text{OH} \\ 3\text{SO}_2\text{Na} \\ 6\text{SO}_2\text{Na} \end{array} \right. \\ \text{C}_6\text{H}_4(1)-\text{N}_2-[2] \left\{ \begin{array}{l} 1\text{OH} \\ 3\text{OH} \end{array} \right. \end{array} \right. \end{array}$	B	7,329	
476	BENZAMINE BROWN 3 GO..... Sodium salt of diphenyl-disazo-salicylic-m-phenylene-diamine-4-sulpho-benzene.	WD	0	
476a	BENZAMINE BROWN 3 G (S.—Preparation from amido-amido-azobenzene-sulphonic acid and m-phenylene-diamine).....	WD	16,988	
477	CONGO BROWN.....1880 Sodium salt of sulpho-benzene-azo-resorcin-azo-diphenyl-azo-salicylic acid. $\begin{array}{c} \text{C}_6\text{H}_4(4)-\text{N}_2-[4]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} 1\text{OH} \\ 2\text{CO}_2\text{Na} \end{array} \right. \\ [1] \left  \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2-[4] \left\{ \begin{array}{l} 1\text{OH} \\ 3\text{OH} \end{array} \right. \\ \text{C}_6\text{H}_4(1)-\text{N}_2-[2] \left\{ \begin{array}{l} 1\text{OH} \\ 3\text{OH} \end{array} \right. \end{array} \right. \end{array}$	A BK	3,407	649
477a	CONGO BROWN G..... Benzoin Brown C.....	A BK		
477a	NAPHTHAMINE BROWN (V. M.)..... Naphthamine Brown AMZ (S.; Kal. 1907, 1910, 1912; S. H. IV, 1804-1909). (Current marks, B, 2 B, 3 B, 8 B, D 8 G, D 5 G, D 6 G, G, 4 G, GR, GT, GX, H, O, 2 R, RB, T, U.)..... Naphthamine Brown CMD..... Naphthamine Brown D 3620..... Naphthamine Brown 3834..... Naphthamine Brown 3838..... Naphthamine Brown 3842..... Naphthamine Brown 5576..... Naphthamine Brown G 3843..... Naphthamine Brown G 3845.....	K K K K K K K K K K	42,734	9,482
478	COLUMBIA GREEN.....1893 Sodium salt of diphenyl-disazo-salicylic-1,8-amido-naphthol-4-sulphonic-azo-benzene-4-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_4(4)-\text{N}_2[4]\text{C}_6\text{H}_3(\text{OH})\text{CO}_2\text{Na} \\ [1] \left  \begin{array}{l} \text{C}_6\text{H}_4(4)-\text{N}_2[4] \left\{ \begin{array}{l} 1\text{OH} \\ 2\text{CO}_2\text{Na} \end{array} \right. \\ \text{C}_6\text{H}_4(\text{SO}_2\text{Na})-\text{N}_2[4] \left\{ \begin{array}{l} 1\text{OH} \\ 2\text{CO}_2\text{Na} \end{array} \right. \end{array} \right. \end{array}$	A A A A A A A A A A	24,740	4,723
478a	COLUMBIA GREEN..... Columbia Green B (S.; Kal. 1908, 1910)..... Columbia Green B 80:100..... Columbia Green B 60:100..... Columbia Green G..... Columbia Green G 60:100.....	A A A A A A		
478a	DIRECT GREEN (V. M.)..... Direct Green B..... Direct Green 3 GG (Kal. 1906)..... Direct Green (S. H. IV, 1622)..... Direct Green Y..... Direct Green B extra (S.)..... Direct Green B conc..... Direct Green 9753..... Direct Green 34267..... Direct Green BC..... Direct Green B..... Direct Green U.....	I I I I I I I I I I I I I I I	19,313	4,291
478b	DIRECT DARK GREEN S.....	I	1,100	

## C. TRISAZO COLORS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
479	DIANTIL BLACK R.....1894 Sodium salt of diphenyl-disazo-m-phenylene-diamine-3,6-di- sulpho-1,8-dioxy-naphthalene-azo-naphthalene-4-sulphonic acid.	M	0	
480	CONGO BROWN R.....1888 Sodium salt of sulpho-naphthalene-azo-resorcin-azo-diphenyl- azo-salicylic acid.  $\begin{array}{c} \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_6\text{H}_3\left\{\begin{array}{l} [1]\text{OH} \\ [2]\text{CO}_2\text{Na} \end{array}\right. \\ [1] \downarrow \\ \text{C}_6\text{H}_4[4]-\text{N}_2-[4]\text{C}_6\text{H}_3\left\{\begin{array}{l} [1]\text{OH} \\ [3]\text{OH} \end{array}\right. \\ \text{C}_6\text{H}_5\left\{\begin{array}{l} [1]-\text{N}_2-[2] \\ [5]\text{SO}_2\text{Na} \end{array}\right. \end{array}$	A	3,045	
481	AZO CORINTH.....1892 Sodium salt of 4-sulpho-naphthalene-azo-resorcin-azo-ditolyl- azo-amido-phenol-sulphonic acid (III).  $(d) \text{ Type: } \text{R} \left\{ \begin{array}{l} \text{K} \\ \text{K} \\ \text{K} \end{array} \right.$	GrE	0	
482	ALIZARIN YELLOW FS.....1890 Diphenyl-tolyl-carbinol-trisazo-trisalicylic acid.  $\text{HO.C} \left\{ \begin{array}{l} (\text{C}_6\text{H}_4-\text{N}_2-\text{C}_6\text{H}_3(\text{OH})\text{CO}_2\text{H}) \\ (\text{C}_6\text{H}_4-\text{N}_2-\text{C}_6\text{H}_3(\text{OH})\text{CO}_2\text{H}) \\ (\text{C}_6\text{H}_4-\text{N}_2-\text{C}_6\text{H}_3(\text{OH})\text{CO}_2\text{H}) \end{array} \right.$ $(e) \text{ Type: } \text{R}-\text{N}-\text{N}-\text{R}$ $\begin{array}{ccc} & \text{K} & \\ &   & \\ & \text{O} & \\ &   & \\ \text{K} & & \text{K} \end{array}$	DH	0	
483	ROSOPHENINE.....1887 Sodium salt of azoxytoluene-disazo-bi- $\alpha$ -naphthol-sulphonic acid.  $\text{O} \left\{ \begin{array}{l} \text{N}-\text{C}_6\text{H}_4(\text{CH}_3)-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array}\right. \\ \text{N}-\text{C}_6\text{H}_4(\text{CH}_3)-\text{N}=\text{N}-[2]\text{C}_{10}\text{H}_7\left\{\begin{array}{l} [1]\text{OH} \\ [4]\text{SO}_2\text{Na} \end{array}\right. \end{array} \right.$	ClCo	200	
483a	RED 2 S.....	P	1,296	
484	ACID MILLING SCARLET.....1889 Sodium salt of azoxy-toluene-disazo- $\alpha$ -naphthol-4-sulphonic- $\beta$ - naphthol-3,6-disulphonic acid.	ClCo	0	

## D. TETRAKISAZO COLORS.

	$(a) \text{ Type: } \text{R} \left\{ \begin{array}{l} \text{K} \\ \text{R} \\ \text{K} \end{array} \right.$			
485	BENZO BROWN G.....1887 Sodium salt of sulpho-benzene-azo-phenylene-brown.  $\begin{array}{c} \text{C}_6\text{H}_4\left\{\begin{array}{l} [4]\text{SO}_2\text{Na} \\ [1]-\text{N}=\text{N}-[2] \end{array}\right\} \text{C}_6\text{H}_3\left\{\begin{array}{l} [1]\text{NH}_2 \\ [3]\text{NH}_2 \end{array}\right. \\ \text{C}_6\text{H}_4\left\{\begin{array}{l} [1]-\text{N}=\text{N}-[4] \\ [3]-\text{N}=\text{N}-[4] \end{array}\right\} \text{C}_6\text{H}_3\left\{\begin{array}{l} [1]\text{NH}_2 \\ [3]\text{NH}_2 \end{array}\right. \\ \text{C}_6\text{H}_4\left\{\begin{array}{l} [1]-\text{N}=\text{N}-[2] \\ [4]\text{SO}_2\text{Na} \end{array}\right\} \end{array}$	By	0	
485a	BENZO BROWN (V. M.)..... Benzo Brown D 3 G extra..... Benzo Brown 5 G 27916..... Benzo Brown 2 GC..... Benzo Brown 3 GC..... Benzo Brown NBX..... Benzo Brown MC..... Benzo Brown RC..... Benzo Brown TR 22439.....	By By By By By By By By By	41,808	\$7,12

## D. TETRAKISAZO COLORS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
486	<b>DIRECT BROWN J.</b> .....1891 Sodium salt of carboxy-benzene-azo-phenylene-brown. (Derivative of Bismarck Brown, No. 283.)  $\begin{array}{c} \text{C}_6\text{H}_4(\text{CO}_2\text{Na})-\text{N}=\text{N}-\left[ \begin{array}{c} 2 \\ 4 \end{array} \right] \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1 \\ 3 \end{array} \right\} -\text{N}=\text{N}-\left[ \begin{array}{c} 2 \\ 4 \end{array} \right] \text{C}_6\text{H}_4(\text{CO}_2\text{Na})-\text{N}=\text{N}-\left[ \begin{array}{c} 2 \\ 4 \end{array} \right] \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. \end{array}$ Direct Brown JJB..... Direct Brown JP.....	I I	3,640	\$1,005
487	<b>BENZO BROWN B.</b> .....1887 Sodium salt of sulpho-naphthalene-azo-phenylene-brown. (Derivative of Bismarck Brown, No. 283.)  $\begin{array}{c} \text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 1 \\ 3 \end{array} \right\} \text{SO}_2\text{Na} -\text{N}=\text{N}-\left[ \begin{array}{c} 2 \\ 4 \end{array} \right] \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1 \\ 3 \end{array} \right\} -\text{N}=\text{N}-\left[ \begin{array}{c} 2 \\ 4 \end{array} \right] \text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. \\ \text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 1 \\ 3 \end{array} \right\} \text{SO}_2\text{Na} -\text{N}=\text{N}-\left[ \begin{array}{c} 2 \\ 4 \end{array} \right] \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. \end{array}$	By	493	
488	<b>TOLUYLENE BROWN R.</b> .....1899 Sodium salt of sulpho-toluene-disazo-bi-m-phenylene-diamine-azo-naphthalene-sulphonic acid.  $\begin{array}{c} \text{C}_{10}\text{H}_7(\text{SO}_2\text{Na})-\text{N}_2-\text{C}_6\text{H}_4 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. \\ \text{C}_6\text{H}_4(\text{CH}_3)(\text{SO}_2\text{Na}) \left\{ \begin{array}{l} 1 \\ 3 \end{array} \right\} -\text{N}_2-\text{C}_6\text{H}_4 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. \\ \text{C}_{10}\text{H}_7(\text{SO}_2\text{Na})-\text{N}_2-\text{C}_6\text{H}_4 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. \end{array}$	GrE	261	
489	<b>HESSIAN BROWN BBN.</b> .....1899 Sodium salt of diphenyl-disazo-bi-resorcin-azo-benzene-4-sulphonic acid.	L	0	
490	<b>COTTON BROWN.</b> .....1890 Obtained by the action of tetrazotised diamines (benzidine, etc.), or their sulpho derivatives, upon chrysoidines. Benzon Brown BX. Cotton Brown B 9. (Current marks, A, N.) Cotton Brown C 10.	By C C	5,000	1,115
490a	<b>COTTON BROWN (V. M.)</b> ..... Cotton Brown T. Cotton Brown M. Cotton Brown T. Cotton Brown B. Cotton Brown F8. Cotton Brown 3 R. Cotton Brown 100. Cotton Brown 137. Cotton Brown 153. Cotton Brown CR.....	I S S Lev Lev Lev Lev Lev Lev Q	23,975	5,207
	(b) Type: $\text{R} \left\{ \begin{array}{c} \text{K}-\text{K}^1 \\ \text{K}-\text{K}^2 \end{array} \right\}$			
491	<b>DIANIL BLACK PR.</b> .....1896  $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1 \\ 3 \end{array} \right\} \text{SO}_2\text{Na} -\text{N}=\text{N}-\left[ \begin{array}{c} 2 \\ 4 \end{array} \right] \text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 6\text{SO}_2\text{Na} \\ 8\text{OH} \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1 \\ 3 \end{array} \right\} -\text{N}=\text{N}-\left[ \begin{array}{c} 2 \\ 4 \end{array} \right] \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1 \\ 3 \end{array} \right\} -\text{N}=\text{N}-\left[ \begin{array}{c} 2 \\ 4 \end{array} \right] \text{C}_{10}\text{H}_7 \left\{ \begin{array}{l} 6\text{SO}_2\text{Na} \\ 8\text{OH} \end{array} \right. \end{array}$	M	0	
	(c) Type: $\text{R}-\text{K} \left\{ \begin{array}{c} \text{R} \\ \text{K} \end{array} \right\} \text{K}^3$			
492	<b>ANTHRACENE ACID BROWN B.</b> .....1896  $\begin{array}{c} \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. -\text{N}=\text{N}-\text{C}_{10}\text{H}_6-\text{N}=\text{N}-\text{C}_6\text{H}_5 \left\{ \begin{array}{l} \text{OH} \\ \text{CO}_2\text{H} \\ \text{NO}_2 \end{array} \right. \\ \text{C}_6\text{H}_5 \left\{ \begin{array}{l} 1\text{NH}_2 \\ 3\text{NH}_2 \end{array} \right. -\text{N}=\text{N}-\text{C}_{10}\text{H}_6-\text{N}=\text{N}-\text{C}_6\text{H}_5 \left\{ \begin{array}{l} \text{OH} \\ \text{CO}_2\text{H} \\ \text{NO}_2 \end{array} \right. \end{array}$	M	0	

## E. UNCLASSIFIED AZO COLORS.

The following 824 azo dyes, enumerated under 765 heads, are currently manufactured in Europe and consumed in the United States. Their chemical composition and methods of manufacture have not yet been made public. In many cases their identity as monoazo, or disazo, or even polyazo colors has been established. It is probable that in numerous instances they might properly be listed under preceding colors, either as identical in composition or very closely allied chemically with the 462 azo dyes, the molecular structure of which has been ascertained with more or less accuracy.

The annual consumption of many of these dyes has assumed notable proportions. In nearly all cases very full details have been published regarding the physical, chemical, and tinctorial properties of these colors and the conditions under which they can be advantageously employed by the dyer. References to such sources of information as are available are found in connection with the great majority of the following names of colors as they appear alphabetically in the index to Schultz's "Farbstofftabellen," 5th edition (1914). The annual volumes of the German "Färberkalender" contain in a compact form much useful information on the new dyes or modifications of older dyes which have appeared during the preceding 12 months. Most valuable in this connection is the large Manual of Azo Colors, compiled by Prof. G. Schultz, forming Part IV of Heumann's treatise on "Die Anilinfarben und ihre Fabrikation." All known data on the azo colors up to 1906 are here gathered and carefully arranged in a volume of 2,600 pages. Much additional knowledge has accumulated during the past decade. It is eminently to be desired that it should be digested, classified, and made available for the practical needs of manufacturers and consumers of azo dyes.

Throughout the following section references are given to the index of Schultz's "Farbstofftabellen" (S.), to Schultz's treatise on the azo colors (S. H. IV), and to the "Färberkalender" (Kal.) whenever they furnish information regarding any individual dye.

The order followed in the enumeration of these unclassified azo dyes is essentially the same as that observed in listing different names and marks under the serial headings. The products of the six great German companies are first given, the companies being arranged in alphabetical order. Then follow the colors of the smaller German companies, likewise in alphabetical order, and of the Dutch, Belgian, French, Swiss, and British companies in similar arrangement. The azo colors manufactured by each company succeed each other, also in alphabetical order, with rare exceptions.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A1	BRILLIANT BORDEAUX SD (S.; S. H. IV, 1400; S. J., 2d ed., 809).....1897	A	4,773	
	CHROMANIL BLACK.....1898		8,079	\$2,424
A2	Chromanil Black BF (S. H. IV, 1828-1839; S. J., 2d ed., 977)...	A		
A3	Chromanil Black FF extra.....	A		
A4	CHROMANIL BLUE R.....	A	597	
A5	CHROMANIL BROWN 2 G (S. H. IV, 1748; S. J., 2d ed., 959) ..	A	3,706	
	CHROME FAST BLACK.....		76,451	10,172
A6	Chrome Fast Black F (S. 1907; R. 68).....	A		
A7	Chrome Fast Black P 4 B (S.; Kal. 1908).....	A		
A8	Chrome Fast Black PF (S.; Kal. 1908).....	A		
A9	Chrome Fast Black PT (S.; Kal. 1908).....	A		
A10	CHROME FAST BROWN R (S.; Kal. 1913).....	A	99	
A11	CHROME FAST RED G (S.; S. H. IV, 1472, 1473, 1474)....1902	A	51	
	COLUMBIA BROWN.....		20,793	3,072
A12	Columbia Brown M (S.; Kal. 1906).....	A		
A13	Columbia Brown R (S.; S. H. IV, 1750).....	A		
A14	COLUMBIA ORANGE R (S.; S. H. IV, 1537).....1899	A	16,351	
A15	COLUMBIA VIOLET R (S.; S. H. IV, 1728).....1900	A	3,715	
	COLUMBIA FAST BLUE.....1895		84,661	12,879
A16	Columbia Fast Blue 2 G (S.; S. J., 2d ed., 939; S. H. IV, 1635) ..	A		
A17	Columbia Fast Blue R extra.....	A		
A18	COLUMBIA FAST SCARLET 4 B (S.; S. H. IV, 1563)....1900	A	1,638	
A19	CYPRUS GREEN B (S.; S. H. IV, 1407).....1900	A	1,400	
A20	DIRECT DEEP BLACK E extra conc. (S. H. IV, 1857)....1898	A	5,423	
	GUINEA CARMINE.....1899		1,199	279
A22	Guinea Carmine B (S.; S. H. IV, 1383).....	A		
A23	Guinea Carmine D.....	A		
A24	GUINEA RED 4 R (S.; S. H. IV, 1382).....1896	A	1,003	
A25	METACHROME OLIVE B powder (S.; Kal. 1911; R. 69).....	A	3,194	
A26	METACHROME OLIVE BROWN G powder (S.; Kal. 1909; R. 69).....	A	5,126	
A27	METACHROME YELLOW RA (S.; Kal. 1912; S. H. IV, 1468) ..	A	575	

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>NAPHTHOGENE BLUE</b> .....		<b>33,847</b>	<b>\$8,624</b>
A28	Naphthogene Blue B (S.; Kal. 1909).....	A		
A29	Naphthogene Blue 2 R (S.; S. H. IV, 1642; R. 63).....	A		
A30	Naphthogene Blue 4 R (S.; S. H. IV, 1643).....	A		
A31	Naphthogene Blue 6 R (S.; Kal. 1909).....	A		
	<b>NEROL</b> .....		<b>65,441</b>	<b>9,751</b>
A32	Nerol B (S.; Kal. 1911; S. H. IV, 869).....	A		
A32	Nerol B extra.....	A		
A33	Nerol 2 B (S.; Kal. 1911; S. H. IV, 869; R. 55).....	A		
A33	Nerol 2 B extra (S.; Kal. 1911; S. H. IV, 869).....	A		
A34	Nerol BL extra.....	A		
A35	Nerol 2 BL extra (S.; Kal. 1911).....	A		
A36	Nerol VL (S.; Kal. 1911).....	A		
A 37	<b>ORTHO BLACK 3 B</b> (S.; Kal. 1905; S. H. IV, 2423).....	A	<b>1</b>	
	<b>ORTHO CYANINE</b> .....		<b>5,406</b>	<b>1,406</b>
A38	Ortho Cyanine B (S.; Kal. 1905; S. H. IV, 2417).....	A		
A39	Ortho Cyanine 6 G.....	A		
A44	<b>SOLAMINE BLUE B</b> (S.; Kal. 1903; S. H. IV, 1638).....	A	<b>21,704</b>	
A44a	<b>SOLAMINE RED</b> (S.; Kal. 1914).....	A	<b>3,179</b>	
A45	<b>TABORA BLACK X</b> (S.; S. H. IV, 1827).....	A	<b>298</b>	
	<b>ZAMBESI BLACK</b> .....		<b>629,359</b>	<b>107,689</b>
A46	Zambesi Black B (S.; S. H. IV, 1832; S. J., 2d ed., 979).....	A		
A47	Zambesi Black 2 BA.....	A		
A48	Zambesi Black BH strong 50:100.....	A		
A49	Zambesi Black BR (S.; Kal. 1899; S. H. IV, 1837; S. J. 2d ed., 979).....	A		
A50	Zambesi Black D (S.; S. H. IV, 1835; S. J., 2d ed., 979).....	A		
A50	Zambesi Black D extra.....	A		
A50	Zambesi Black D extra 60:100.....	A		
A51	Zambesi Black F (S.; S. H. IV, 1834).....	A		
A52	Zambesi Black OBA.....	A		
A53	Zambesi Black OTA.....	A		
A54	Zambesi Black R (S. H. IV, 1838).....	A		
A55	Zambesi Black V (S.; Kal. 1903; S. H. IV, 1840).....	A		
A55	Zambesi Black V new.....	A		
A56	Zambesi Black VM.....	A		
A57	<b>ZAMBESI BORDEAUX TB</b> .....	A	<b>1,098</b>	
	<b>ZAMBESI RED</b> .....		<b>1,865</b>	<b>712</b>
A58	Zambesi Red B (S.; Kal. 1907).....	A		
A59	Zambesi Red 4 B.....	A		
A60	Zambesi Red 6 B.....	A		
A61	Zambesi Red 8 B.....	A		
A62	<b>ZAMBESI RUBINE B</b> .....	A	<b>9,674</b>	
	<b>ZAMBESI SCARLET</b> .....		<b>9,321</b>	<b>3,529</b>
A63	Zambesi Scarlet 6 B extra.....	A		
A64	Zambesi Scarlet 2 BL extra conc.....	A		
A65	Zambesi Scarlet FR extra.....	A		
A66	Zambesi Scarlet PR extra.....	A		
	<b>AZO MAGENTA</b> .....		<b>4,742</b>	<b>1,822</b>
A67	Azo Magenta 6 BX.....	B		
A68	Azo Magenta RS.....	B		
	<b>CORVAN BLACK</b> .....		<b>19,983</b>	<b>1,870</b>
A69	Corvan Black BG.....	B		
A70	Corvan Black T (S.).....	B		
	<b>COTTON BLACK</b> .....		<b>24,506</b>	<b>4,842</b>
A71	Cotton Black 3 B (S.; S. H. IV, 1843).....	B		
A72	Cotton Black BGX (S.; 1904).....	B		
A73	Cotton Black BNX (S.; S. H. IV, 1844).....	B		
A74	Cotton Black 4 extra conc.....	B		
A75	Cotton Black PF extra.....	B		
A75	Cotton Black PF extra conc.....	B		
A76	<b>ETHYL BLUE B</b> (S.; Kal. 1908).....	B	<b>450</b>	

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>FAST RED.....</b>		<b>2, 007</b>	<b>\$322</b>
A77	Fast Red A (new for silk).....	B		
A78	Fast Red ANSX.....	B		
A79	Fast Red IB8.....	B		
A80	LITHOL CLARET B powder (S. 1908).....	1908 B	99	
	<b>LITHOL FAST ORANGE.....</b>		<b>26, 641</b>	<b>4, 281</b>
A81	Lithol Fast Orange R paste (S.; R. Staebler, 106).....	B		
A82	Lithol Fast Orange R 15813 powder.....	B		
	<b>NEW CLARET.....</b>		<b>1, 559</b>	<b>227</b>
A83	New Claret B.....	B		
A84	New Claret B 22114.....	B		
A85	New Claret P.....	B		
A86	New Claret R.....	B		
A87	<b>OXAMINE ACID BROWN G.....</b>	B	<b>4, 658</b>	
	<b>OXAMINE BLACK.....</b>		<b>50, 032</b>	<b>10, 472</b>
A88	Oxamine Black A (S.; S. H. IV, 1845).....	1900 B		
A89	Oxamine Black BB.....	B		
A90	Oxamine Black BBNX.....	B		
A91	Oxamine Black BRTX.....	B		
A92	Oxamine Black RN (S. 1904).....	B		
A93	<b>OXAMINE BRILLIANT RED BX (S.; Kal. 1914).....</b>	B	<b>2, 879</b>	
A94	<b>OXAMINE BRILLIANT VIOLET RX.....</b>	B	<b>49</b>	
	<b>OXAMINE BROWN.....</b>		<b>92, 454</b>	<b>22, 500</b>
A95	Oxamine Brown A.....	B		
A96	Oxamine Brown G (S. 1906; R. 62).....	1906 B		
A97	Oxamine Brown 3 G (S. 1907).....	B		
A98	Oxamine Brown GR.....	B		
A99	Oxamine Brown GX.....	B		
A100	Oxamine Brown 3 GX.....	B		
A101	<b>OXAMINE CLARET B (S. 1907).....</b>	B	<b>6, 701</b>	
	<b>OXAMINE COPPER BLUE.....</b>		<b>10, 222</b>	<b>1, 941</b>
A102	Oxamine Copper Blue RR (S.; Kal. 1908).....	B		
A103	Oxamine Copper Blue RRX.....	B		
	<b>OXAMINE DARK BLUE.....</b>		<b>22, 810</b>	<b>4, 246</b>
A104	Oxamine Dark Blue BGE (S. 1905).....	B		
A105	Oxamine Dark Blue BGX.....	B		
A106	Oxamine Dark Blue R (S. 1905).....	B		
A107	Oxamine Dark Blue BRRX (S. 1906; Kal. 1908).....	B		
	<b>OXAMINE DARK BROWN.....</b>		<b>10, 509</b>	<b>1, 312</b>
A108	Oxamine Dark Brown G.....	B		
A109	Oxamine Dark Brown R.....	B		
	<b>OXAMINE FAST BLUE.....</b>		<b>7, 935</b>	<b>2, 362</b>
A110	Oxamine Fast Blue 6 BX.....	B		
A111	Oxamine Fast Blue RR.....	B		
A112	<b>OXAMINE FAST PINK BX.....</b>	B	<b>51</b>	
	<b>OXAMINE LIGHT BLUE.....</b>		<b>143</b>	<b>106</b>
A113	Oxamine Light Blue B.....	B		
A114	Oxamine Light Blue GX.....	B		
	<b>OXAMINE LIGHT BROWN.....</b>		<b>146</b>	<b>21</b>
A115	Oxamine Light Brown G.....	B		
A116	Oxamine Light Brown R.....	B		
	<b>OXAMINE LIGHT GREEN.....</b>		<b>122</b>	<b>33</b>
A117	Oxamine Light Green B.....	B		
A118	Oxamine Light Green G.....	B		
A119	Oxamine Light Green 3 G.....	B		
	<b>OXAMINE YELLOW.....</b>		<b>402</b>	<b>117</b>
A120	Oxamine Yellow A (spirit).....	B		
A121	Oxamine Yellow 3 G.....	B		
	<b>PALATINE CHROME BLUE.....</b>		<b>42, 244</b>	<b>4, 679</b>
A122	Palatine Chrome Blue BB (S. 1904).....	B		
A123	Palatine Chrome Blue W 2 B.....	B		

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>PALATINE CHROME GREEN.....</b>		<b>19,645</b>	<b>\$6,452</b>
A124	Palatine Chrome Green G.....	B		
A125	Palatine Chrome Green GX.....	B		
A126	<b>PALATINE CHROME RED R (S.).....</b>	<b>B</b>	<b>798</b>	
A127	<b>PALATINE LIGHT YELLOW R (S. 1910).....</b>	<b>B</b>	<b>1,587</b>	
A128	<b>PALATINE ORANGE R (X).....</b>	<b>B</b>	<b>999</b>	
A129	<b>PHENAMINE BLUE G (S.; S. H. IV, 1643).....</b>	<b>B</b>	<b>300</b>	
A130	<b>PRIMAZINE YELLOW G extra (S.).....</b>	<b>B</b>	<b>1,001</b>	
	<b>SCARLET.....</b>		<b>80,778</b>	<b>7,281</b>
A131	Scarlet BN.....	B		
A132	Scarlet GA.....	B		
A133	Scarlet 15 N.....	B		
A134	Scarlet S 2 R.....	B		
A135	Scarlet S 3 R.....	B		
A136	Scarlet 2 SRM.....	B		
A137	Scarlet 7214.....	B		
A138	Scarlet (yellow shade) 17413.....	B		
A139	Scarlet (yellow shade) 24211.....	B		
	<b>WOOL RED.....</b>		<b>851</b>	<b>165</b>
A140	Wool Red G (S. 1903; a disazo compound from diamines).....	B		
A141	Wool Red K 10 BX.....	B		
	<b>WOOL SCARLET.....</b>		<b>12,780</b>	<b>1,417</b>
A142	Wool Scarlet RR.....	B		
A143	Wool Scarlet 3 RB.....	B		
	<b>ACID BLACK.....</b>		<b>18,660</b>	<b>2,031</b>
A144	Acid Black E extra 27154.....	By		
A145	Acid Black M 26184.....	By		
A146	<b>ACID BRILLIANT RED 2 B.....</b>	<b>By</b>	<b>66</b>	
	<b>ACID CHROME BLACK.....</b>		<b>39,508</b>	<b>8,052</b>
A147	Acid Chrome Black LG 25736 (S.; S. H. IV, 1520).....	By		
A147a	Acid Chrome Black G.....	I		
A148	Acid Chrome Black RH (S.; Kal. 1907).....	By		
A148a	Acid Chrome Black RHN (S.; Kal. 1907, 1908).....	BK		
A149	Acid Chrome Black WS 22250 (S.; S. H. IV, 1520).....	By		
A150	<b>ACID SILK BLACK R 27176.....</b>	<b>By</b>	<b>12,323</b>	
A151	<b>AZO ACID BROWN 26049 (S.; S. J., 2d ed., 853; S. H. IV, 1430).....</b>	<b>By</b>	<b>2,002</b>	
A152	<b>AZO ALIZARIN BROWN I 27210.....</b>	<b>By</b>	<b>1,080</b>	
A153	<b>AZO CRIMSON S.....</b>	<b>By</b>	<b>6,193</b>	
A154	<b>BENZO BORDEAUX 6 B (S.; S. H. IV, 1576).....</b>	<b>By</b>	<b>7,271</b>	
	<b>BENZO BRONZE.....</b>		<b>721</b>	<b>157</b>
A155	Benzo Bronze E.....	By		
A156	Benzo Bronze GC (S.; Kal. 1912).....	By		
A157	<b>BENZO CHROME BLACK BLUE B (S.; S. H. IV, 1648).....</b>	<b>By</b>	<b>51,315</b>	
	<b>BENZO CHROME BROWN.....</b>		<b>26,768</b>	<b>5,438</b>
A158	Benzo Chrome Brown B (S.; S. H. IV, 1762).....	By		
A159	Benzo Chrome Brown BS (S.; S. H. IV, 1767).....	By		
A160	Benzo Chrome Brown G (S.; S. H. IV, 1761).....	By		
A161	Benzo Chrome Brown 5 G (S.; S. H. IV, 1766).....	By		
A162	Benzo Chrome Brown R (S.; S. H. IV, 1763).....	By		
	<b>BENZO COPPER BLUE.....</b>		<b>4,768</b>	<b>931</b>
A163	Benzo Copper Blue B (S.; S. H. IV, 1651).....	By		
A164	Benzo Copper Blue 2 B (S.; Kal. 1907).....	By		
	<b>BENZO DARK BROWN.....</b>		<b>2,015</b>	<b>337</b>
A165	Benzo Dark Brown (S.; S. H. IV, 1754).....	By		
A165	Benzo Dark Brown extra.....	By		

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>BENZO DARK GREEN</b> .....		12, 038	\$2, 123
A166	Benzo Dark Green B (S.; S. H. IV, 1617).....	1898 By		
A167	Benzo Dark Green GG (S. H. IV, 1618).....	1900 By		
A168	<b>BENZO DEEP BLACK SS (S.; Kal. 1911)</b> .....	By	99	
	<b>BENZO FAST BLACK</b> .....		100, 268	22, 246
A169	Benzo Fast Black L (S.; S. H. IV, 1849).....	1889 By		
A169	Benzo Fast Black L conc. 28235.....	By		
A170	<b>BENZO FAST BORDEAUX 6 BL</b> .....	By	6, 066	
	<b>BENZO FAST BROWN</b> .....		9, 782	2, 106
A171	Benzo Fast Brown 3 GL.....	By		
A172	Benzo Fast Brown RL.....	By		
A173	<b>BENZO FAST EOSINE BL</b> .....	By	514	
	<b>BENZO FAST GRAY</b> .....		1, 569	363
A174	Benzo Fast Gray (S.; S. H. IV, 1822).....	1893 By		
A175	Benzo Fast Gray BL.....	By		
	<b>BENZO FAST HELIOTROPE</b> .....		12, 018	5, 541
A176	Benzo Fast Heliotrope BL.....	By		
A177	Benzo Fast Heliotrope 4 BL.....	By		
A178	Benzo Fast Heliotrope 5 RH.....	By		
A179	Benzo Fast Heliotrope 2 RL.....	By		
	<b>BENZO FAST ORANGE</b> .....		3, 494	1, 058
A180	Benzo Fast Orange 2 RL.....	By		
A181	Benzo Fast Orange S (S.; S. H. IV, 1540).....	By		
A182	<b>BENZO FAST RUBINE BL</b> .....	By	249	
	<b>BENZO GREEN</b> .....		16, 506	2, 850
A184	Benzo Green BB (S.; S. H. IV, 1616).....	1898 By		
A185	Benzo Green C (S.; S. H. IV, 1616).....	1904 By		
A186	Benzo Green FF (R. 62).....	By		
A187	Benzo Green FFG (R. 62).....	By		
A188	Benzo Green G (S.; S. H. IV, 1615).....	By		
A189	<b>BENZO NEW RED 4 B (S.; Kal. 1912)</b> .....	By	3, 171	
A190	<b>BENZO PURE YELLOW FF</b> .....	By	249	
	<b>BENZO RED</b> .....		19, 420	4, 715
A191	Benzo Red 10 B (S.; S. H. IV, 1568).....	1901 By		
A192	Benzo Red 12 B.....	By		
	<b>BENZO RUBINE</b> .....		4, 765	1, 242
A193	Benzo Rubine HW (S.; Kal. 1912).....	By		
A194	Benzo Rubine SC (S.; Kal. 1911).....	By		
A195	<b>BENZO SCARLET BC (S.; Kal. 1909)</b> .....	By	578	
A196	<b>BENZOFORM BLUE B (Kal. 1914)</b> .....	By	699	
A197	<b>BENZOFORM BROWN R (Kal. 1914)</b> .....	By	1, 997	
A198	<b>BENZOFORM ORANGE G (Kal. 1914)</b> .....	By	1, 098	
	<b>BENZOFORM RED</b> .....		701	240
A199	Benzoform Red G (Kal. 1914).....	By		
A200	Benzoform Red 2 GF (Kal. 1914).....	By		
A201	<b>BENZOFORM SCARLET B</b> .....	By	301	
A202	<b>BENZOFORM YELLOW R (Kal. 1914)</b> .....	By	1, 497	
	<b>BENZO RHODULINE RED</b> .....		11, 873	1, 813
A203	Benzo Rhoduline Red B (S.; S. H. IV, 1572).....	1900 By		
A204	Benzo Rhoduline Red 3 B (S.; S. H. IV, 1573).....	1900 By		
A205	<b>BISMARCK ACID BROWN</b> .....	By	99	
	<b>BRILLIANT BENZO FAST VIOLET</b> .....		919	222
A206	Brilliant Benzo Fast Violet 2 RL (S.; Kal. 1910).....	By		
A206a	Brilliant Benzo Fast Violet BL (S.; Kal. 1910).....	By		



## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A207	BRILLIANT BENZO GREEN B (S.; S. H. IV, 1619).....	By	2,350	
	BRILLIANT BENZO VIOLET.....		2,110	\$717
A208	Brilliant Benzo Violet B (S.; Kal. 1908).....	By		
A209	Brilliant Benzo Violet 2 R (S.; Kal. 1908).....	By		
	BRILLIANT FAST BLUE.....		11,553	3,309
A210	Brilliant Fast Blue B (S.; Kal. 1908; R. 61).....	By		
A211	Brilliant Fast Blue 3 BX (S.; Kal. 1911).....	By		
A212	Brilliant Fast Blue 2 G (S.; Kal. 1908).....	By		
A213	Brilliant Fast Blue 4 G (S.; Kal. 1910).....	By		
A214	BRILLIANT FAST RED P (S.; Kal. 1905).....	By	99	
	CASHMERE BLACK.....		12,309	1,881
A215	Cashmere Black 3 BN (S.; S. H. IV, 1454).....	By		
A216	Cashmere Black V.....	By		
A217	CASHMERE BLUE TG extra (S., a mixture).....1905	By	6,074	
A218	CHLORAMINE BROWN G (S.; S. H. IV, 1757).....1895	By	952	
A219	CHLORAMINE RED 8 BS (S.; S. H. IV, 1584).....1903	By	9,748	
A220	CHLORAMINE VIOLET (S.).....	By	201	
A221	CHLORAMINE VIOLET R (S.; S. H. IV, 1731).....1899	By	1,193	
A222	DIAMOND BORDEAUX R (S.; Kal. 1907).....	By	273	
	DIAMOND RED.....		2,457	490
A223	Diamond Red BH.....	By		
A224	Diamond Red G (S.; Kal. 1910).....	By		
A225	DIAZO BORDEAUX 7 B (S.; S. H. IV, 1585).....	By	7,670	
A226	DIAZO BRILLIANT ORANGE GR extra (S.; Kal. 1908; 1913).....	By	99	
	DIAZO BRILLIANT SCARLET.....		33,909	14,210
A227	Diazo Brilliant Scarlet B extra (S.; Kal. 1909).....	By		
A228	Diazo Brilliant Scarlet 3 B extra.....	By		
A229	Diazo Brilliant Scarlet BG extra (S.; Kal. 1912, 1913).....	By		
A230	Diazo Brilliant Scarlet 2 BL extra (S.; Kal. 1909).....	By		
A230	Diazo Brilliant Scarlet 2 BL extra conc. (S.; Kal. 1909).....	By		
A231	Diazo Brilliant Scarlet 5 BL (S.; Kal. 1909).....	By		
A231	Diazo Brilliant Scarlet 5 BL extra (S.; Kal. 1909).....	By		
A232	Diazo Brilliant Scarlet 6 B extra (S.; Kal. 1909).....	By		
A233	Diazo Brilliant Scarlet G extra (S.; Kal. 1909).....	By		
A234	Diazo Brilliant Scarlet PR extra (S.; Kal. 1909).....	By		
A235	Diazo Brilliant Scarlet S 4 B.....	By		
A236	DIAZO BLUE X (S. H. IV, 1657).....1894	By	99	
	DIAZO BROWN.....		5,124	1,694
A237	Diazo Brown G (S.; S. H. IV, 1771).....1903	By		
A238	Diazo Brown 3 G (S.; S. H. IV, 1771).....	By		
A239	Diazo Brown 6 G (S.; S. H. IV, 1771).....	By		
A240	Diazo Brown NR extra (S.; S. H. IV, 1773).....	By		
A241	Diazo Brown 3 RB (S.; S. H. IV, 1773).....	By		
	DIAZO FAST BLACK.....		29,330	7,476
A242	Diazo Fast Black extra (S. H. IV, 1887).....	By		
A243	Diazo Fast Black BIX (S.; S. H. IV, 1889).....1900	By		
A244	Diazo Fast Black G conc. (S.; S. H. IV, 1888).....1899	By		
A245	Diazo Fast Black MG (S.; S. H. IV, 1887).....	By		
A245	Diazo Fast Black MG conc. 25023.....	By		
A246	Diazo Fast Black SD (S.; S. H. IV, 1890).....1902	By		
A246	Diazo Fast Black SD conc. ....1902	By		
A246	Diazo Fast Black SD conc. 22787.....	By		
A247	Diazo Fast Black V (S.; S. H. IV, 1887).....	By		
A248	DIAZO FAST BORDEAUX BL.....	By	2,194	
A249	DIAZO FAST GREEN GE.....	By	201	
A250	DIAZO FAST RED 7 BL.....	By	1,396	
	DIAZO FAST VIOLET.....		145	59
A251	Diazo Fast Violet BL.....	By		
A252	Diazo Fast Violet 3 RL.....	By		

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	DIAZO FAST YELLOW.....		402	\$157
A253	Diazo Fast Yellow G.....	By		
A254	Diazo Fast Yellow 2 G.....	By		
A255	DIAZO OLIVE G (S.; Kal. 1911).....	By	1,299	
A255a	DIAZO PURE BLUE 3 GL (Kal. 1911).....	By	290	
A256	DIAZO RUBINE B (S.; S. H. IV, 1587).....1902	By	8,833	
	DIAZO SKY BLUE.....		6,150	1,270
A257	Diazo Sky Blue B.....	By		
A258	Diazo Sky Blue 3 GL.....	By		
	DIRECT BLACK.....		12,048	2,019
A259	Direct Black FBS.....	By		
A260	Direct Black RC (Kal. 1909).....	By		
A261	Direct Black VT (S. H. IV, 1860).....1899	By		
	DIRECT FAST BROWN.....		7,385	1,574
A262	Direct Fast Brown GG (S.; S. H. IV, 1760).....1896	By		
A262	Direct Fast Brown GG 28032 (S.; S. H. IV, 1760).....1896	By		
	DOUBLE PONCEAU.....		1,644	195
A263	Double Ponceau 2 R.....	By		
A264	Double Ponceau 4 R.....	By		
A265	FAST PONCEAU L (Kal. 1912).....	By	300	
A266	HELIO BORDEAUX BL paste (Kal. 1912).....	By	14,703	
A267	HELIO FAST BLUE BL conc. (Kal. 1914).....	By	1,497	
A268	HELIO FAST RUBERINE RL.....	By	51	
A269	HELIO FAST VIOLET AL (Kal. 1907).....	By	600	
A270	HELIO FAST YELLOW 8 GL paste.....	By	11	
	HELIO RED.....		3,245	540
A271	Helio Red RM 27283 (S.) (for lakes).....1904	By		
A272	Helio Red RMT paste 27561.....	By		
A272	Helio Red RMT 27445.....	By		
A273	IMPERIAL GREEN GI.....	By	683	
A274	METANIL RED 3 B extra (S.; S. H. IV, 1405).....1902	By	99	
A275	MILLING ORANGE G (S.).....	By	1,997	
A276	NAPHTHYLAMINE GREEN T conc. 27954 (Kal. 1913).....	By	602	
A277	ORANGE RO (S.; S. H. IV, 2413).....1904	By	24,283	
A278	PARA BLACK B extra conc. (S.; Kal. 1912).....1910	By	2,247	
	PARA BROWN.....		998	241
A279	Para Brown GK (S.; Kal. 1911; R. 64).....	By		
A280	Para Brown RK (S.; Kal. 1911; R. 64).....	By		
A281	Para Brown SC (S.; R. 64).....1909	By		
A282	PARA BRILLIANT ORANGE G.....	By	99	
A283	PARA GREEN 2 BL (S.; Kal. 1910).....	By	800	
A284	PARA ORANGE G (S.; Kal. 1910, 1911).....	By	1,596	
A285	PHENYLAMINE BLACK 4 B (S.; S. H. IV, 1445).....1899	By	14,066	
	PLUTO BLACK.....		30,010	6,024
A286	Pluto Black A extra (S.; S. H. IV, 1865).....1902	By		
A287	Pluto Black BS extra (S.; S. H. IV, 1865).....1899	By		
A288	Pluto Black CF extra (S.; S. H. IV, 1872).....1903	By		
A288	Pluto Black CF extra conc.....	By		
A289	Pluto Black F extra (S.; S. H. IV, 1868).....1901	By		
A290	Pluto Black F extra conc.....	By		
A290	Pluto Black G 28241 (S.; S. H. IV, 1863).....1897	By		
A291	Pluto Black SS extra (S.; Kal. 1905).....1903	By		

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- facturer.	Importation.	
			Pounds.	Value.
	<b>PLUTO BROWN</b> .....		14,530	\$2,542
A292	Pluto Brown GG (S.; S. H. IV, 1771; a mixture).....	By		
A293	Pluto Brown NB (S.; S. H. IV, 1771; a mixture).....	By		
A294	Pluto Brown R (S.; S. H. IV, 1769).....	By		
A295	<b>PLUTO MILLING BLACK B</b> (Kal. 1909).....	By	1,290	
A296	<b>PLUTOFORM BLACK 3 GL</b> (S.; Kal. 1912, 1913).....	By	51	
	<b>SULPHON ORANGE</b> .....		765	205
A297	Sulphon Orange G (S.; Kal. 1907).....	By		
A297	Sulphon Orange 5 G (Kal. 1914).....	By		
A298	<b>SULPHON VIOLET R extra</b> (S.; Kal. 1914).....	By	452	
	<b>SULPHON YELLOW</b> .....		7,090	3,195
A299	Sulphon Yellow 5 G.....	By		
A299	Sulphon R (S.).....	By		
A300	Sulphon Yellow R conc. (S. 1904) (for lake).....	By		
	<b>WOOL BLACK</b> .....		4,765	861
A301	Wool Black N 4 B (S.; S. H. IV, 1444).....	By		
A302	Wool Black NP.....	By		
	<b>ALPHANOL BLACK</b> .....		30,120	3,124
A303	Alphanol Black 44 B (S.; R. 55). (Current marks, B, G, R.)..	C		
A303	Alphanol Black 26 G 1461 (S.; Kal. 1909).....	C		
A303	Alphanol Black 33 L 390.....	C		
A303	Alphanol Black 44 R 1671 (S.; Kal. 1909).....	C		
A303	Alphanol Black 33 Y 1403.....	C		
	<b>ALPHANOL BLUE</b> .....		5,994	1,055
A306	Alphanol Blue 37 F 1485. (Current marks, B, R, G, N, 5 RN.)..	C		
A309	Alphanol Blue 23 S.....	C		
A309	Alphanol Blue 33 S 1397.....	C		
A310	Alphanol Blue 38 W 1526.....	C		
A311	<b>ANTHRACENE ACID BLUE 38 M</b> 1516. (Current marks, 2 B, 3 B, BBN, GG, RR.).....	C	4,963	
A312	<b>ANTHRACENE BLACK FF</b> .....	C	15	
	<b>ANTHRACENE CHROME BLUE</b> .....		5,087	2,071
A313	Anthracene Chrome Blue 28 D 1258 (S. H. IV, 2431). (Current marks, B, BB, BW, F, FR, G, H, R, RRW, T, TB.).....	C		
A313	Anthracene Chrome Blue 32 D 1358.....	C		
A313	Anthracene Chrome Blue 69 E 2293.....	C		
A313	Anthracene Chrome Blue 20 G 1061.....	C		
A313	Anthracene Chrome Blue 29 L 1290.....	C		
A313	Anthracene Chrome Blue 16 X 977.....	C		
	<b>ANTHRACENE CHROMATE BROWN</b> .....		9,542	2,735
A316	Anthracene Chromate Brown 67 A 2239 (S.; Kal. 1914). (Current marks, BG, EB, 3 G, LR.).....	C		
A316	Anthracene Chromate Brown 29 D 1283.....	C		
A316	Anthracene Chromate Brown 30 T 1323.....	C		
A316	Anthracene Chromate Brown 69 Y 2312.....	C		
A322	<b>ANTHRACENE CHROMATE YELLOW 54 W</b> 1926. (Current marks, F, V, M.).....	C	2,994	
	<b>ANTHRACENE CHROME BROWN</b> .....		1,542	378
A323	Anthracene Chrome Brown 13 S 897 (S.; S. H. IV, 1489). (Current marks, A, D, DWN, SWN.).....	C		
A323	Anthracene Chrome Brown 31 T 1348.....	C		
A325	<b>ANTHRACENE CHROME GREEN</b> .....	C	400	
	<b>ANTHRACENE CHROME RED</b> .....		1,708	488
A326	Anthracene Chrome Red 56 D 1958 (S. H. IV, 1478). (Current mark, R.).....	C		
A326	Anthracene Chrome Red 56 E 1959.....	C		
A326	Anthracene Chrome Red 68 M 2275.....	C		
	<b>AZO FAST BLUE</b> .....		7,904	2,269
A329	Azo Fast Blue 50 M 1816 (S. 1912).....	C		
A330	Azo Fast Blue 50 N 1817.....	C		
A331	Azo Fast Blue 49 S 1797.....	C		
A332	<b>AZO FAST VIOLET 68 O</b> 2277 (Kal. 1912).....	C	7,998	
A333	<b>AZO MERINO BLACK 50 Q</b> 1820 (S.; S. H. IV, 1433). (Current marks, B, 6 B, 8 B, BE, 6 BE, BN, 3 BN, 6 BN.).....	C	8,501	

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A334	AZO ORSEILLE 2 B.....	C	3,096	
A335	AZO WOOL BLACK 18 Q 1020. (Current marks, B, 4 B, G.)....	C	1,198	
	AZO WOOL VIOLET.....		12,944	\$3,296
A336	Azo Wool Violet 15 H 937 (S.; S. H. IV, 1427-1428). (Current marks, 4 B, 7 R.).....	C		
A336	Azo Wool Violet 51 H 1837.....	C		
A336	Azo Wool Violet 15 R 946.....	C		
A338	DIAMINE ALDEHYDE BLUE 67 V 2259 (Kal. 1914).....	C	331	
A339	DIAMINE ALDEHYDE SCARLET 68 D 2267.....	C	300	
A340	DIAMINE AZO BLUE 4 Y 485 (S.; S. H. IV, 1683-1686). (Current marks, 6 B, R, RR, 51, 54.).....1896	C	3,497	
	DIAMINE AZO BORDEAUX.....		1,323	248
A341	Diamine Azo Bordeaux B conc.....	C		
A341	Diamine Azo Bordeaux B.....	C		
	DIAMINE AZO SCARLET.....		6,646	1,992
A342	Diamine Azo Scarlet 58 P 2022 (S.; Kal. 1914; R. 63): (Current marks, A, B, 4 B, 8 B, 4 BL, 6 BL, 8 BS.).....	C		
A342	Diamine Azo Scarlet 58 Q 2023.....	C		
A342	Diamine Azo Scarlet 58 R 2024.....	C		
A342	Diamine Azo Scarlet 65 W 2210.....	C		
A342	Diamine Azo Scarlet 65 X 2211.....	C		
A342	Diamine Azo Scarlet 65 Y 2212.....	C		
A343	DIAMINE BRILLIANT RUBINE 56 Y 1979 (S.; Kal. 1910)....	C	1,801	
A344	DIAMINE BRILLIANT SCARLET 58 K 2017 (S.; S. H. IV, 1593). (Current mark, S.).....1901	C	5,409	
A345	DIAMINE BRILLIANT VIOLET 35 E 1434 (S.; Kal. 1909). (Current mark, 2 R.).....	C	1,739	
	DIAMINE CATECHINE.....		66,876	14,942
A346	Diamine Catechine 10 E 889 (S.; S. H. IV, 1785-1787). (Current marks, B, BZ, G, 3 G.).....	C		
A346	Diamine Catechine FF 445.....	C		
A346	Diamine Catechine GG 446.....	C		
A346	Diamine Catechine 33 T 1398.....	C		
A347	DIAMINE DARK BLUE B (S.; S. H. IV, 1676).....1898	C	9,691	
A348	DIAMINE DARK GREEN N.....	C	5,194	
	DIAMINE FAST BLACK.....		7,999	1,233
A349	Diamine Fast Black 32 A 1355 (S.; Kal. 1914; S. H. IV, 1913). (Current marks, C, CB, F, GV, N, X.).....	C		
A349	Diamine Fast Black 66 M 2225.....	C		
A349	Diamine Fast Black 19 U 1049.....	C		
	DIAMINE FAST BLUE.....		28,890	7,227
A351	Diamine Fast Blue 16 D 958 (S.; Kal. 1905; S. H. IV, 1677-1680). (Current marks, BN, C, CG, FFB, FFG, G.).....1901	C		
A351	Diamine Fast Blue 17 G 986.....	C		
A351	Diamine Fast Blue 51 Y 1853.....	C		
A352	DIAMINE FAST BORDEAUX 61 Y 2108 (S.; Kal. 1912). (Current mark, 6 BS.).....	C	999	
	DIAMINE FAST BROWN.....		6,922	2,071
A353	Diamine Fast Brown 34 E 1409 (S.; Kal. 1909). (Current marks, G, GB, R.).....	C		
A353	Diamine Fast Brown 69 H.....	C		
A353	Diamine Fast Brown 32 Y 1378.....	C		
A353	Diamine Fast Brown 32 Z 1379.....	C		
A354	DIAMINE FAST GRAY 34 G 1411 (S.; Kal. 1909). (Current marks, BN, RN.).....	C	1,199	
	DIAMINE FAST ORANGE.....		17,387	4,511
A355	Diamine Fast Orange 2 A 605 (S.). (Current marks, EG, ER.).....	C		
A355	Diamine Fast Orange 36 S 1472.....	C		
A355	Diamine Fast Orange 36 T 1473.....	C		

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- facturer.	Importation.	
			Pounds.	Value.
A357	<b>DIAMINE FAST SCARLET</b> ..... Diamine Fast Scarlet 59 C 2035 (S.; Kal. 1908, 1909, 1911). (Current marks, BB, 4 B, 8 B, GB, GG, GS, 4 BN, 6 BS, 8 BN, GFF, 4 BFF, 4 BFF, 5 BFF, 7 BFF, 8 BF, 10 BF.).....	C	2,632	\$3,046
A357	Diamine Fast Scarlet 59 D 2036.....	C		
A357	Diamine Fast Scarlet 67 O 2252.....	C		
A357	Diamine Fast Scarlet 65 P 2203.....	C		
A357	Diamine Fast Scarlet 65 R 2205.....	C		
A357	Diamine Fast Scarlet 65 T 2207.....	C		
A357	Diamine Fast Scarlet 58 V 2028.....	C		
A357	Diamine Fast Scarlet 58 V 2031.....	C		
A357	Diamine Fast Scarlet 58 W 2029.....	C		
A357	Diamine Fast Scarlet 69 W 2310.....	C		
A357	Diamine Fast Scarlet 58 X 2030.....	C		
A358	<b>DIAMINE FAST VIOLET</b> ..... Diamine Fast Violet 43 B 1631 (S.; Kal. 1910, 1912). (Current marks, BBN, FFBN, FFR, FFRN.).....	C	2,397	885
A358	Diamine Fast Violet 43 C 1632.....	C		
A359	<b>DIAMINE GRAY G</b> (S.; S. H. IV, 1823).....1895	C	2,300	
A360	<b>DIAMINE HELIOTROPE</b> ..... Diamine Heliotrope 11 F 835 (S.; S. H. IV, 1736). (Current marks, B, G, O.).....1901	C	4,721	761
A360	Diamine Heliotrope 11 G 836.....	C		
A360	Diamine Heliotrope 10 U 824.....	C		
A361	<b>DIAMINE JET BLACK</b> ..... Diamine Jet Black 3 B, 523 (S.; Kal. 1914; S. H. IV, 1895, 1900). (Current marks, BB, CR, 4 D, GG, JEI, OO, OOOO, RB, SE, SOOO, SS.).....	C	14,001	4,315
A361	Diamine Jet Black GG 503.....	C		
A361	Diamine Jet Black 30 L 1315.....	C		
A361	Diamine Jet Black NN 509.....	C		
A362	<b>DIAMINE NERON</b> ..... Diamine Neron 53 Z 1904 (S.; Kal. 1912). (Current mark, BB.).....	C	26,962	6,204
A362	Diamine Neron 54 V 1925.....	C		
A363	<b>DIAMINE NEW BLUE 4 F 467</b> (S.; S. H. IV, 1667-1669). (Cur- rent marks, G, P, R.).....1895	C	50	
A364	<b>DIAMINE NITRAZOL BROWN G</b> (S.; S. H. IV, 1791; R. 64).....1898	C	99	
A365	<b>DIAMINE NITRAZOL GREEN 49 D 1783</b> (S.; Kal. 1909, 1910, 1912; R. 64). (Current marks, BB, G, GF, S, KB, KG.).....	C	1,601	
A366	<b>DIAMINE NITRAZOL ORANGE 48 A 1755</b> . (Current mark, R.).....	C	301	
A367	<b>DIAMINE ORANGE</b> ..... Diamine Orange HH 416 (S.; S. H. IV, 1545-1549). (Current marks, B, D, DC, F, G, GC, R.).....	C	17,068	2,851
A367	Diamine Orange PP 423.....	C		
A367	Diamine Orange 5 T.....	C		
A367	Diamine Orange 5 T 608.....	C		
A367	Diamine Orange 52 U 1874.....	C		
A368	<b>DIAMINE SKY BLUE</b> ..... Diamine Sky Blue 3 C 409. (Current mark, FF.).....	C	41,115	
A368	Diamine Sky Blue 4 G 468.....	C		
A368	Diamine Sky Blue 37 P 1494.....	C		
A369	<b>DIAMINE VIOLET RED B</b> (S.; S. H. IV, 1592).....	C	699	
A370	<b>DIAMINE YELLOW</b> ..... Diamine Yellow AA 194 (S.; S. H. IV, 1525). (Current marks, CP, CPO, CPI, CPII, N, R.).....	C	6,197	2,144
A370	Diamine Yellow 15 T 948.....	C		
A371	<b>DIAMINERAL BLUE</b> ..... Diamineral Blue 6 B 513 (S.; Kal. 1906, 1909, 1911). (Current marks, B, CV, CVB, R, 3 RC.).....	C	4,975	1,104
A371	Diamineral Blue 21 F 1085.....	C		
A371	Diamineral Blue 36 V 1475.....	C		
A372	<b>DIAMINERAL BROWN G</b> (S.; S. H. IV, 1790).....	C	999	

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A373	DIAMINOGEN SKY BLUE.....	C	2,195	\$1,017
A373	Diaminogen Sky Blue N conc.....	C		
A373	Diaminogen Sky Blue N.....	C		
A374	ERYTHRINE C.....	C	300	
A375	EXCELSIOR LAKE SCARLET.....		2,502	227
A375	Excelsior Lake Scarlet 59 E 2037 (S.; S. H. IV, 2464). (Current marks, JN, JN.).....	C		
A375	Excelsior Lake Scarlet 59 F 2038.....	C		
A376	HAT BLACK.....		2,594	1,151
A376	Hat Black 11 M 841 (S.; Kal. 1905, 1907; S. H. IV, 2424). (Current marks, BB, 2 BV, 3 BV, 5 BV, FF, HF, HT, J.).....	C		
A376	Hat Black 29 Z 1304.....	C		
A377	LAKE SCARLET 59 L 2044. (Current marks, G, GG, R.).....	C	2,499	
A378	MILLING YELLOW.....		2,601	929
A378	Milling Yellow X 191 (Kal. 1914). (Current marks, II, O, O.O.).....	C		
A378	Milling Yellow 66 Y 2237.....	C		
A379	NAPHTHOL BLUE 3 Y 460 (S. H. IV, 1418). (Current marks, G, R.).....	C	2,200	
A380	NAPHTHYLAMINE BLUE BLACK 28 S 1272 (S.). (Current marks, B, 5 B.).....	C	999	
A381	NAVY BLUE 53 T 1898.....	C	201	
A382	OXY DIAMINE BLACK.....		146,629	24,636
A382	Oxy Diamine Black 4 C 657 (S.; S. H. IV, 1902, 1907). (Current marks, A, AFF, AM, AT, B, BG, BM, BZ, BZS, CBS, D, FFC, FFG, JB, JE, JEL, JWF, JWG, N, NF, NR, NRT, R, RR, SA, SAFU, SOOO, SOOOO, VI, US.).....	C		
A382	Oxy Diamine Black 32 H 1362.....	C		
A382	Oxy Diamine Black HH 504.....	C		
A382	Oxy Diamine Black 69 M 2300.....	C		
A382	Oxy Diamine Black MM 508.....	C		
A382	Oxy Diamine Black 18 P 1019.....	C		
A382	Oxy Diamine Black 4 S 564.....	C		
A382	Oxy Diamine Black 7 S 747.....	C		
A382	Oxy Diamine Black 48 S 1772.....	C		
A382	Oxy Diamine Black 4 V 567.....	C		
A382	Oxy Diamine Black 7 V 750.....	C		
A382	Oxy Diamine Black 14 Z 929.....	C		
A383	OXY DIAMINE BLUE.....		6,300	1,239
A383	Oxy Diamine Blue 6 G 711 (S.; S. H. IV, 1673). (Current marks, B, 5 B, G, 3 G, 5 G, R, 3 R.).....	C		
A383	Oxy Diamine Blue 7 JS 738.....	C		
A383	Oxy Diamine Blue 66 L 2224.....	C		
A383	Oxy Diamine Blue 66 N 2226.....	C		
A383	Oxy Diamine Blue 50 W 1826.....	C		
A383	Oxy Diamine Blue 20 Z 1079.....	C		
A384	OXY DIAMINE BROWN.....		23,498	3,810
A384	Oxy Diamine Brown 21 A 1080 (S.; S. H. IV, 1789). (Current marks, G, 3 GN, RM, RN, RO.).....	C		
A384	Oxy Diamine Brown 8 B 756.....	C		
A384	Oxy Diamine Brown 19 Y 1053.....	C		
A384	Oxy Diamine Brown 26 U 1224.....	C		
A385	OXY DIAMINE CARBON.....		24,388	7,864
A385	Oxy Diamine Carbon 32 S 1372. (Current marks, JB, JE, JEL.).....	C		
A385	Oxy Diamine Carbon 32 T 1373.....	C		
A386	OXY DIAMINE RED S (S.; S. H. IV, 1591).....	C	602	
A387	OXY DIAMINOGEN.....		139,118	26,632
A387	Oxy Diaminogen 13 A 880 (S.; S. H. IV, 1917). (Current marks, ED, EF, EM, FF, H, FFG, FFN, OB, OBB, OT.).....	C		
A387	Oxy Diaminogen 13 B 881.....	C		
A387	Oxy Diaminogen 13 C 882.....	C		
A387	Oxy Diaminogen 13 C.....	C		
A387	Oxy Diaminogen 69 G 2295.....	C		
A387	Oxy Diaminogen 28 J 1263.....	C		
A387	Oxy Diaminogen 19 R 1046.....	C		
A387	Oxy Diaminogen 38 S 1522.....	C		
A387	Oxy Diaminogen 25 X 1202.....	C		

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A388	PARA DIAMINE BLACK.....		18,634	\$2,690.
A388	Para Diamine Black 31 E 1334 (S.; S. H. IV, 1912). (Current	C C C		
A388	marks, B, BB, FFB, OAKH.).....			
A388	Para Diamine Black 54 G 1911.....			
A388	Para Diamine Black 47 L 1740.....			
A389	AZO CERISE.....		3,379	674.
A389	Azo Cerise M.....	K		
A389	Azo Cerise 1618.....	K		
A390	AZO INDIGINE.....		661	555.
A390	Azo Indigine 419.....	K		
A390	Azo Indigine 420.....	K		
A391	AZO WOOL VIOLET 415.....	K	220	
A392	BIEBRICH ACID VIOLET R (S.; S. H. IV, 1423). (Current	K		
A392	marks, 2 B, 6 B.)..... 1896		4,982	
A393	CHROME YELLOW.....		5,128	1,292.
A393	Chrome Yellow SM (3.; S. H. IV, 1462)..... 1899	K		
A393	Chrome Yellow 2501.....	K		
A394	CLOTH RED.....		2,582	488.
A394	Cloth Red BB (Kal. 1910). (Current marks, B.).....	K		
A394	Cloth Red 1769.....	K		
A394	Cloth Red 2586.....	K		
A395	CONGO MAGENTA.....		4,246	694.
A395	Congo Magenta.....	K		
A395	Congo Magenta 3616.....	K		
A396	COTTON BLACK.....		300,473	44,567
A396	Cotton Black A.....	K		
A396	Cotton Black CK.....	K		
A396	Cotton Black GB.....	K		
A396	Cotton Black UG.....	K		
A396	Cotton Black 392 (reddish).....	K		
A396	Cotton Black 393 (greenish).....	K		
A396	Cotton Black 393 (reddish).....	K		
A396	Cotton Black 461 (reddish).....	K		
A396	Cotton Black 3893.....	K		
A396	Cotton Black 3929.....	K		
A396	Cotton Black 3933.....	K		
A396	Cotton Black 3933 extra.....	K		
A397	DIAZOGENE BLUE.....		2,261	1,232.
A397	Diazogene Blue 2 R extra.....	K		
A397	Diazogene Blue 4585.....	K		
A398	DIRECT VIOLET.....		392	224.
A398	Direct Violet 3653 (S.).....	K		
A398	Direct Violet 4561.....	K		
A399	NAPHTHAMINE DIRECT BLUE.....		7,191	1,612.
A399	Naphthamine Direct Blue BXR.....	K		
A399	Naphthamine Direct Blue ER.....	K		
A399	Naphthamine Direct Blue 2 R.....	K		
A399	Naphthamine Direct Blue 3 R.....	K		
A399	Naphthamine Direct Blue 3692.....	K		
A400	NAPHTHAMINE DIRECT GREEN AG.....	K	4,685	
A401	NAPHTHAMINE GREEN.....		5,632	1,276.
A401	Naphthamine Green (S.; S. H. IV, 1622). (Current marks,	K K K K		
A401	A, AG, AN, B, BE, GE, TE.).....			
A401	Naphthamine Green 3782.....			
A401	Naphthamine Green 3784.....			
A401	Naphthamine Green 4611.....	K		
A402	NAPHTHAMINE ORANGE.....		7,607	1,958.
A402	Naphthamine Orange 1925 (S.; Kal. 1914; S. H. IV, 1553). (Cur-	K K K		
A402	rent marks, G, NG, R, 2 R, TG, TR.).....			
A402	Naphthamine Orange 3552.....			
A402	Naphthamine Orange 3555.....	K		
A403	SALICINE BLUE B (S.; Kal. 1907; R. 68).....	K	16,234	
A404	SALICINE BORDEAUX R (S.; Kal. 1913).....	K	459	

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A405	SALICINE BROWN..... Salicine Brown 2833 (S.; Kal. 1905, 1908; R. 69). (Current marks, BN, R, RC.).....	K	1,473	3429
A405	Salicine Brown 2812.....	K		
A406	SALICINE DARK GREEN CS (S.).....	K	5,453	
A407	SALICINE GREEN CP.....	K	309	
A408	SALICINE ORANGE..... Salicine Orange 2 R (S.; Kal. 1910; R. 67).....	K	1,413	274
A409	Salicine Orange 2542.....	K		
A409	Salicine Orange 2541 (S.; Kal. 1910; R. 67). (Current marks, D, GR.).....1908	K		
A410	SALICINE RED..... Salicine Red B (S.; S. H. IV, 1481).....1898	K	2,762	536
A411	Salicine Red G (S.; S. H. IV, 1481).....1898	K		
A412	SALICINE VIOLET R (S.; Kal. 1913).....	K	1,257	
A412a	UNION RED..... Union Red B.....	K	2,863	613
A412b	Union Red BS.....	K		
A413	AMIDO AZO BLACK T (S.; Kal. 1912).....	M	1,500	
A414	AMIDO NAPHTHOL BLACK..... Amido Naphthol Black 4 B extra (S.).....	M	10,750	1,219
A415	Amido Naphthol Black RK.....	M		
A416	AMIDO RED BL.....	M	135	
A417	AMIDO YELLOW E (S.; Kal. 1914).....	M	250	
A418	AZO ACID BLACK..... Azo Acid Black B 15 per cent red. (S.; S. H. IV, 1455).....	M	19,500	3,042
A419	Azo Acid Black 3 BL extra.....	M		
A419	Azo Acid Black 3 BL extra 15 per cent red.....	M		
A420	Azo Acid Black R.....	M		
A421	Azo Acid Black TL II new.....	M		
A422	AZO BLACK O.....	M	300	
A423	AZO ORANGE RUBINE.....	M	254	
A424	BRILLIANT SCARLET AL.....	M	1,000	
A425	CHROME BLACK DF extra.....	M	2,761	
A426	CUTCH BROWN D (S.).....	M	750	
A427	DIANIL CRIMSON B.....	M	500	
A428	DIAZANIL SCARLET..... Diazanil Scarlet B (S.; Kal. 1910).....	M	4,125	1,411
A429	Diazanil Scarlet 6 B (S.; Kal. 1910).....	M		
A430	FAST MORDANT BLUE..... Fast Mordant Blue B (S.; Kal. 1907; R. 68).....	M	17,000	4,612
A431	Fast Mordant Blue R (S.; Kal. 1910; R. 68).....	M		
A435	LAKE SCARLET RED D.....	M	2,357	
A436	MILLING BLUE 2 R extra (S. 1904).....	M	1,000	
A437	NAPHTHALENE BLUE..... Naphthalene Blue B (S. 1899).....	M	23,000	5,102
A438	Naphthalene Blue DL (S. 1899).....	M		
A439	VICTORIA SCARLET..... Victoria Scarlet R.....	M	22,400	2,379
A440	Victoria Scarlet 3 R (S. 1898).....	M		
A441	WOOL BLACK N.....	M	2,500	
A442	BENZO BRILLIANT BLUE 2 GDN.....	BK	441	



## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A443	BRILLIANT SCARLET R (S.).....	BK	441	
	DIRECT GREEN.....		31,194	\$5,091
A444	Direct Green B.....	CG		
A445	Direct Green C.....	CG		
A446	Direct Green G.....	CG		
A447	Direct Green FGD.....	CG		
A448	Direct Green 10865.....	CG		
	DIRECT VIOLET.....		5,080	841
A449	Direct Violet R.....	CG		
A450	Direct Violet 11508.....	CG		
	HELIGOLAND BLACK.....		25,132	4,151
A451	Heligoland Black FFN extra conc. A.....	CG		
A451	Heligoland Black FFN extra A.....	CG		
	HELIGOLAND BLUE.....		3,049	1,100
A452	Heligoland Blue 6 B (Hurst, Dict. of Coal-Tar Colors, 121). 1894	CG		
A453	Heligoland Blue RW 200 per cent (Hurst, Dict. of Coal-Tar Colors, 121).....	CG		
A454	AZIDINE DARK BROWN (S.; Kal. 1909).....	CJ	220	
A455	AZIDINE FAST ORANGE ES (Kal. 1914).....	CJ	220	
A456	AZIDINE FAST SCARLET E 4 BS (Kal. 1914).....	CJ	772	
A457	AZO MILLING YELLOW 5 G (S.; Kal. 1914).....	GrE	201	
A458	CLOTH YELLOW R (S.; Kal. 1909; R. 67).....	GrE	1,497	
	DIRECT YELLOW.....		3,194	504
A459	Direct Yellow EG00.....	GrE		
A460	Direct Yellow G00 (Kal. 1911).....	GrE		
A461	Direct Yellow R (S.).....	GrE		
	HYDRAZINE YELLOW.....		1,197	297
A462	Hydrazine Yellow 00 (S.; Kal. 1912; S. H. IV, 317; R. 53). 1884	GrE		
A463	Hydrazine Yellow 80 (S.; Kal. 1912; S. H. IV, 317; R. 53)....	GrE		
	NEW TOLUYLENE BROWN.....		5,692	1,062
A464	New Toluylene Brown O (S.; S. H. IV, 1815).....	GrE		
A465	New Toluylene Brown 00 (S.; S. H. IV, 1815).....	GrE		
A466	New Toluylene Brown R (S.; S. H. IV, 1815).....	GrE		
A467	OXYCHROME BLACK F (Kal. 1909).....	GrE	3,395	
A468	OXYCHROME BLUE BLACK BGO (Kal. 1912).....	GrE	106	
	OXYCHROME BROWN.....		10,400	2,235
A469	Oxychrome Brown V (S.; Kal. 1909).....	GrE		
A470	Oxychrome Brown VA (S.; Kal. 1900).....	GrE		
A471	Oxychrome Brown VN (S.; Kal. 1910, 1912).....	GrE		
	OXYCHROME YELLOW.....		10,065	1,985
A472	Oxychrome Yellow D (Kal. 1914).....	GrE		
A473	Oxychrome Yellow DG.....	GrE		
A474	Oxychrome Yellow 2 G.....	GrE		
	SCARLET.....		397	233
A475	Scarlet AB.....	GrE		
A476	Scarlet 6 B.....	GrE		
A477	TOLUYLENE BLACK G00 (S.; S. H. IV, 1935).....	GrE	1,100	202
	TRIAZOL BLUE.....		10,148	1,580
A478	Triazol Blue B (S.; S. H. IV, 1717-1724).....	GrE		
A479	Triazol Blue B00 (S.; S. H. IV, 1717-1724).....	GrE		
A480	Triazol Blue BBOO (S.; S. H. IV, 1717-1724).....	GrE		
A481	Triazol Blue 4 B00 (S.; Kal. 1907, 1908, 1913).....	GrE		
A482	Triazol Blue R (S.; S. H. IV, 1717-1724).....	GrE		
A483	Triazol Blue 3242.....	GrE		
A484	TRIAZOL BORDEAUX B (S.; Kal. 1907).....	GrE	800	

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- facturer.	Importation.	
			Pounds.	Value.
	<b>TRIAZOL BROWN</b> .....		17,087	\$2,554
A485	Triazol Brown GOOA (S.).....1903	GrE		
A486	Triazol Brown GOOO (S.; Kal. 1911; S. H. IV, 1818).....	GrE		
A487	Triazol Brown HRO.....	GrE		
A488	Triazol Brown SOOO (S.; Kal. 1911; S. H. IV, 1818).....	GrE		
	<b>TRIAZOL DARK BLUE</b> .....		19,489	2,647
A489	Triazol Dark Blue BOO (S.; S. H. IV, 1721).....	GrE		
A490	Triazol Dark Blue BHOOO (Kal. 1911; a polyazo compound).....	GrE		
A491	Triazol Dark Blue BHPOOOO (Kal. 1911).....	GrE		
A492	Triazol Dark Blue BHTOOO (Kal. 1911).....	GrE		
A493	Triazol Dark Blue 3 G (S.).....	GrE		
A494	Triazol Dark Blue ROO (S.; S. H. IV, 1721).....	GrE		
	<b>TRIAZOL GREEN</b> .....		2,293	335
A495	Triazol Green BPOO (S.; Kal. 1911, 1914; a polyazo compound).....	GrE		
A496	Triazol Green GPOO (S.; Kal. 1914).....	GrE		
	<b>TRIAZOL PURE BLUE</b> .....		1,497	221
A497	Triazol Pure Blue 3 B (S.; Kal. 1908, 1914).....	GrE		
A498	Triazol Pure Blue R (S.; Kal. 1908).....	GrE		
	<b>TRIAZOL VIOLET</b> .....		7,760	1,739
A499	Triazol Violet R (S.; Kal. 1907, 1908).....	GrE		
A500	Triazol Violet RR (S.; Kal. 1907, 1908).....	GrE		
A501	<b>ANTHRACHROME RED A</b> (S.; Kal. 1910).....	L	220	
	<b>DIRECT BROWN</b> .....		1,639	330
A502	Direct Brown extra.....	L		
A503	Direct Brown G.....	L		
A504	Direct Brown HB.....	L		
A505	Direct Brown N (S.; S. H. IV, 1811).....1903	L		
A506	<b>DIRECT ORANGE 6 R extra</b> .....	L	551	
	<b>DOMINGO ALIZARIN BLACK</b> .....		8,683	1,677
A507	Domingo Alizarin Black EF.....	L		
A508	Domingo Alizarin Black G (S.; Kal. 1905; S. H. IV, 2437).1903	L		
	<b>DOMINGO ALIZARIN BLUE</b> .....		2,968	1,826
A509	Domingo Alizarin Blue R extra (S.; Kal. 1905).....	L		
A509	Domingo Alizarin Blue R extra 81397.....	L		
A509a	<b>DOMINGO ALIZARIN BORDEAUX</b> (S.; Kal. 1905).....	L	110	
A510	<b>DOMINGO BLACK 46216 extra</b> (S. 1905).....	L	2,755	
A511	<b>PEGU BROWN G</b> (S.; S. H. IV, 1810; S. J., 2d ed., 960)....1896	L	110	
	<b>ACIDOL AZO VIOLET</b> .....		1,658	334
A512	Acidol Azo Violet R (Kal. 1913).....	tM		
A513	Acidol Azo Violet S.....	tM		
A514	<b>ACIDOL FAST VIOLET A 2 R</b> .....	tM	661	
	<b>BRILLIANT SCARLET</b> .....		12,565	1,625
A515	Brilliant Scarlet 2 R (S.).....	tM		
A516	Brilliant Scarlet 4 RSP.....	tM		
A516	Brilliant Scarlet 4 R extra conc.....	tM		
A517	<b>RENOL BORDEAUX</b> (S.).....	tM	1,874	
A518	<b>RENOL DARK GREEN NOONG</b> (Kal. 1908).....	tM	547	
A519	<b>RENOL FAST RED 4 B</b> .....	tM	1,190	
	<b>RENOL LIGHT BLUE</b> .....		3,527	1,800
A520	Renol Light Blue A double conc.....	tM		
A521	Renol Light Blue G extra conc.....	tM		
A522	<b>RENOL RED extra</b> .....	tM	498	
A523	<b>SITARA ORANGE 1 paste</b> (insoluble; for pigments).....	tM	20	
	<b>ANTHRACYL CHROME BLUE</b> .....		24,879	6,325
A524	Anthracyl Chrome Blue 2 B (Kal. 1907).....	tM		
A525	Anthracyl Chrome Blue D (Kal. 1907).....	tM		

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A526	BENZO AZO RED B (Kal. 1914).....	WD	201	
A527	CROCEINE SCARLET.....	WD	12,210	\$2,235
A528	Croceine Scarlet MO conc.....	WD		
	Croceine Scarlet MOO.....	WD		
A529	DIAZO BRILLIANT SCARLET PR extra.....	WD	55	
A530	NAPHTHYLAMINE SKY BLUE DD 300 per cent.....	NF	2,756	
A531	ACID BLUE BLACK (S.; S. H. IV, 1440).....	AW	15,001	
A532	ACID CHROME BLUE (reddish) (S.).....	AW	12,952	
A533	ACID FAST GREEN 8 B extra.....	AW	14,050	
A534	ACID NAVY BLUE SL.....	AW	2,040	
A535	ACID SKY BLUE.....	AW	608	
A536	ACID RED 8.....	AW	608	
	AZO INDIGINE.....		3,425	2,065
A537	Azo Indigine 6 B double.....	AW		
A538	Azo Indigine 8.....	AW		
A539	BRILLIANT FAST BLUE.....	AW	1,229	
A540	CUTCH BROWN extra strong.....	AW	608	
	DIAZOGENE BLACK.....		20,042	6,212
A541	Diazogene Black (Kal. 1913).....	AW		
A542	Diazogene Black AB.....	AW		
A543	Diazogene Black AD.....	AW		
A544	Diazogene Black B extra.....	AW		
A545	Diazogene Black N.....	AW		
	DIAZOGENE BLUE.....		1,229	708
A546	Diazogene Blue R 75 : 100 (Kal. 1913).....	AW		
A547	Diazogene Blue RD (Kal. 1913).....	AW		
A548	DIAZOGENE GARNET BB.....	AW	110	
A549	DIAZOGENE RED 8 B extra conc. (Kal. 1910).....	AW	110	
	DIRECT BLACK.....		15,245	2,804
A550	Direct Black ABC.....	AW		
A551	Direct Black C.....	AW		
A552	DIRECT CHROME BROWN.....	AW	12,178	
A553	DIRECT FAST BLUE.....	AW	2,299	
A554	DRAZALINE ALIZARIN red.....	AW	110	
A555	DRAZALINE BLACK BH extra strong.....	AW	1,217	
	DRAZALINE BLUE.....		10,521	4,425
A556	Drasaline Blue 10 B.....	AW		
A557	Drasaline Blue 2 BFL.....	AW		
A558	Drasaline Blue CV extra conc.....	AW		
A559	Drasaline Blue F.....	AW		
A560	Drasaline Blue FS.....	AW		
A561	Drasaline Blue Black HWF.....	AW		
A562	Drasaline Blue RFL.....	AW		
A563	Drasaline Blue VVV.....	AW		
A564	DRAZALINE BORDEAUX 6 B.....	AW	796	
A565	DRAZALINE BRILLIANT YELLOW extra.....	AW	2,216	
	DRAZALINE BROWN.....		21,756	4,979
A566	Drasaline Brown C 3 B.....	AW		
A567	Drasaline Brown FL.....	AW		
A568	Drasaline Brown G.....	AW		
A569	Drasaline Brown 3 GL.....	AW		
A570	Drasaline Brown 4 J.....	AW		
A571	Drasaline Brown R.....	AW		
A572	DRAZALINE CHLORINE YELLOW G.....	AW	55	

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A573	DRAZALINE DIAMOND VIOLET BB.....	AW	608	
A574	DRAZALINE FAST BLUE 4 GFL.....	AW	606	
A575	DRAZALINE FAST GRAY.....	AW	4,868	
A576	DRAZALINE FAST RED.....	AW	2,432	\$724
A577	Drazaline Fast Red.....	AW		
A578	DRAZALINE FAST YELLOW B double.....	AW	2,172	
A579	DRAZALINE GARNET.....	AW	829	279
A580	Drazaline Garnet BB extra.....	AW		
A581	DRAZALINE GREEN BX.....	AW	220	
A582	DRAZALINE INDIGO BLUE.....	AW	220	
A583	DRAZALINE NEW RED.....	AW	6,741	2,841
A584	Drazaline New Red.....	AW		
A585	DRAZALINE ORANGE.....	AW	2,090	1,242
A586	Drazaline Orange FL.....	AW		
A587	Drazaline Orange G extra conc.....	AW		
A588	DRAZALINE RED.....	AW	1,711	652
A589	Drazaline Red F.....	AW		
A590	Drazaline Red FL.....	AW		
A591	Drazaline Red FV.....	AW		
A592	DRAZALINE SCARLET B.....	AW	608	
A593	DRAZALINE SKY BLUE.....	AW	10,940	5,204
A593	Drazaline Sky Blue FF extra.....	AW		
A593	Drazaline Sky Blue FF extra conc.....	AW		
A593	Drazaline Sky Blue FF extra strong.....	AW		
A593	Drazaline Sky Blue FF pure.....	AW		
A594	DRAZALINE VIOLET.....	AW	2,174	1,075
A595	Drazaline Violet D.....	AW		
A596	Drazaline Violet NFL.....	AW		
A596	Drazaline Violet VB.....	AW		
A597	DRAZALINE YELLOW.....	AW	4,692	1,695
A597	Drazaline Yellow R extra strong.....	AW		
A598	Drazaline Yellow R.....	AW		
A598	Drazaline Yellow S.....	AW		
A599	Drazaline Yellow T.....	AW		
A600	EXCELSIOR BLACK.....	AW	52,956	
A601	FAST STRAW YELLOW V.....	AW	1,834	
A602	FAST VIOLET R extra.....	AW	611	
A603	HYDRAZOL BLACK.....	AW	10,961	1,629
A604	Hydrazol Black.....	AW		
A604	Hydrazol Black R conc.....	AW		
A605	HYDRAZOL CHROME BLACK.....	AW	51,694	7,499
A606	Hydrazol Chrome Black CB.....	AW		
A606	Hydrazol Chrome Black DB.....	AW		
A607	NEW ACID CHROME BLACK R.....	AW	608	
A608	NEW FAST STRAW YELLOW.....	AW	1,823	
A610	ACID CHROME BLACK RH.....	G	518	
A611	BENZO FAST BLACK.....	G	331	
A612	CHICAGO RED 111 (S. 1906; S. H. IV, 1594).....	G	13,195	
A613	DIAZOPHENYL BLACK L conc. (Kal. 1914).....	G	441	
A614	DIAZOPHENYL BLUE BC.....	G	1,477	

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>DIPHENYL BLACK</b> .....		<b>880</b>	<b>\$336</b>
A615	Diphenyl Black L conc.....	G		
A616	Diphenyl Black RC (S. H. IV, 1920).....	G		
	<b>DIPHENYL BLUE</b> .....		<b>12, 677</b>	<b>3, 842</b>
A617	Diphenyl Blue 3 BC (Kal. 1910; S. H. IV, 1687).....	G		
A618	Diphenyl Blue BEC.....	G		
A619	Diphenyl Blue BBEC.....	G		
A620	Diphenyl Blue BTC.....	G		
A621	Diphenyl Blue 2 B.....	G		
	<b>DIPHENYL DEEP BLACK</b> .....		<b>21, 096</b>	<b>4, 216</b>
A622	Diphenyl Deep Black GC (S. H. IV, 1923).....	1902 G		
A623	Diphenyl Deep Black GN superfine.....	G		
A624	Diphenyl Deep Black GWC.....	G		
A625	Diphenyl Deep Black VN superfine.....	G		
A626	Diphenyl Deep Black VP.....	G		
A627	DIPHENYL FAST GRAY BC (Kal. 1910).....	G	441	
A628	DIPHENYL FAST VIOLET BC 251 (Kal. 1910).....	G	485	
	<b>DIPHENYL GREEN</b> .....		<b>18, 021</b>	<b>4, 097</b>
A629	Diphenyl Green BC (S.; Kal. 1909; S. H. IV, 1621).....	G		
A629	Diphenyl Green 3 GC (S.; Kal. 1909; S. H. IV, 1621).....	G		
A629	Diphenyl Green 3 GF conc. (Kal. 1914).....	G		
A629	Diphenyl Green KGW.....	G		
A629	Diphenyl Green KGW superfine.....	G		
A633	DIPHENYL DARK GREEN BC.....	G	507	
A634	DIPHENYL SCARLET 3 B.....	G	230	
A635	DIPHENYL VIOLET BVC (S. H. IV, 1738).....	G	3, 064	
A636	DIRECT BROWN 3 GNC (S.; S. H. IV, 1800; made from p-nitro- toluene-sulphonic acid).....	G	5, 046	
A637	ERIO FAST BLUE SWR superfine (Kal. 1914).....	G	661	
A638	ERIOAZURINE BC (S. H. IV, 1422).....	1902 G	1, 411	
A639	ERIOCARMINE 2 BC (S. H. IV, 1403).....	1902 G	1, 146	
	<b>ERIOCHROME BROWN</b> .....		<b>4, 442</b>	<b>1, 305</b>
A640	Eriochrome Brown RC (S.; Kal. 1908).....	G		
A641	Eriochrome Brown SDE (S.; Kal. 1909).....	G		
A642	Eriochrome Brown V.....	G		
	<b>ERIOCHROME VIOLET</b> .....		<b>900</b>	<b>224</b>
A643	Eriochrome Violet B (S. 1906).....	G		
A644	Eriochrome Violet 2 BL (Kal. 1911).....	G		
	<b>ERIOCHROME YELLOW</b> .....		<b>9, 507</b>	<b>1, 212</b>
A645	Eriochrome Yellow 2 G paste (R. 67).....	G		
A646	Eriochrome Yellow 3 G (S.; Kal. 1905; R. 67).....	G		
A647	Eriochrome Yellow GR (S.; Kal. 1905; R. 67).....	G		
A648	Eriochrome Yellow S (S.; Kal. 1909; R. 67).....	G		
A649	ERIORUBINE B superfine (S. H. IV, 1404).....	G	121	
	<b>POLYPHENYL BLACK</b> .....		<b>3, 080</b>	<b>510</b>
A650	Polyphenyl Black BVC (S.; S. H. IV, 1921).....	1898 G		
A651	Polyphenyl Black GNC.....	1902 G		
	<b>POLYPHENYL BLUE</b> .....		<b>4, 845</b>	<b>997</b>
A652	Polyphenyl Blue GC (S.; S. H. IV, 1689).....	G		
A653	Polyphenyl Blue GF conc.....	G		
A654	POLYPHENYL BRILLIANT BLUE 3 G conc.....	G	220	
A655	POLYPHENYL FAST RED BC (S.; Kal. 1909).....	G	529	
A656	POLYPHENYL ORANGE RC.....	G	4, 400	
A657	POLYPHENYL YELLOW 3 GC (S.; S. H. IV, 1530).....	1900 G	4, 541	
A658	RENOL LIGHT BLUE G extra conc. (S.).....	G	1, 217	
A659	THIAZINE BLUE (for black).....	G	55	

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A660	VIOLET DIRECT VR.....	G	55	
A661	BENZYL BLACK B (S.; S. H. IV, 2421).....	I	198	
A662	BENZYL REDS.....	I	331	
A663	CHLORANTINE BLUE BB (S.; S. H. IV, 1695-96; derived from naphthaeto-sulphonic acid 1:8:3:6.).....	I	198	
	CHLORANTINE BROWN.....		18,267	\$4,034
A664	Chlorantine Brown BB (S. H. IV, 1801).....	I		
A665	Chlorantine Brown R (S. H. IV, 1801).....	I		
A666	Chlorantine Brown 15521.....	I		
A667	Chlorantine Brown 15895.....	I		
	CHLORANTINE LILAC.....		2,060	769
A668	Chlorantine Lilac B (S.; S. H. IV, 1740).....	I		
A669	Chlorantine Lilac BB (S.).....	I		
	CHLORANTINE ORANGE.....		5,189	1,070
A670	Chlorantine Orange TR (S. H. IV, 1556-7).....	I		
A671	Chlorantine Orange TR 6 per cent.....	I		
A671	Chlorantine Orange 11323 (S. H. IV, 1556).....	I		
A672	CHLORANTINE PURE BLUE (S. H. IV, 1696).....	I	2,777	
A673	CHLORANTINE VIOLET BB (S. H. IV, 1742).....	I	249	
	CHROME FAST BROWN.....		12,204	3,550
A674	Chrome Fast Brown A conc. (S. 1906).....	I		
A675	Chrome Fast Brown BC (S. 1905).....	I		
A676	Chrome Fast Brown G.....	I		
A677	Chrome Fast Brown TV (S. 1912).....	I		
A678	Chrome Fast Brown 12684.....	I		
A679	Chrome Fast Brown V.....	I		
A680	Chrome Fast Brown 15823.....	I		
	CHROME FAST CYANINE.....		9,511	1,717
A681	Chrome Fast Cyanine G (S.; Kal. 1907).....	I		
A681	Chrome Fast Cyanine G 8 per cent.....	I		
	CHROME FAST GREEN.....		12,943	6,670
A682	Chrome Fast Green G (S. 1907).....	I		
A683	Chrome Fast Green GL (S. 1912).....	I		
A684	Chrome Fast Green 16394.....	I		
A685	CHROME FAST ORANGE R (Kal. 1914).....	I	600	
A686	CHROME FAST VIOLET B (Kal. 1908).....	I	99	
	CUPRANIL BROWN.....		24,851	4,859
A687	Cupranil Brown (S.; S. H. IV, 1802; S. J., 2d ed., 968).....	I		
A688	Cupranil Brown (S. H. IV, 1802; S. J., 2d ed., 968).....	I		
A688	Cupranil Brown G 15664.....	I		
A688	Cupranil Brown G 150 per cent.....	I		
A689	Cupranil Brown R (S. H. IV, 1802; S. J., 2d ed., 968).....	I		
A689	Cupranil Brown R 8 per cent.....	I		
A690	Cupranil Brown 12366.....	I		
A690	Cupranil Brown 15596.....	I		
A690	Cupranil Brown 15903.....	I		
A691	CUTCH BROWN 11759 (S. H. IV, 1751).....	I	2,205	
	DIRECT BLACK.....		22,223	4,205
A692	Direct Black E (S. 1906).....	I		
A693	Direct Black 14714.....	I		
A694	DIRECT CHROME BLACK 14722.....	I	110	
A695	DIRECT CUTCH GG (Kal. 1914).....	I	48	
A696	DIRECT FAST BLACK B (Kal. 1908).....	I	11,290	
	DIRECT FAST SCARLET.....		1,171	344
A697	Direct Fast Scarlet B (S.; Kal. 1909).....	I		
A698	Direct Fast Scarlet 17474.....	I		
A698	Direct Fast Scarlet 17525.....	I		
A698	Direct Fast Scarlet 17616.....	I		
A699	DIRECT SAFRANINE B (S. H. IV, 1801).....	I		

## E. UNCLASSIFIED AZO COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A700	DIRECT SKY BLUE.....	I	4,704	\$1,225
A700	Direct Sky Blue (green shade) conc. 250 per cent.....	I		
A700	Direct Sky Blue 13108.....	I		
A701	INDIGENE BLUE.....	I	1,422	525
A702	Indigene Blue BB (S. 1399; S. H. IV, 1696).....	I		
A702	Indigene Blue R (S. 1509; S. H. IV, 1696).....	I		
A702	Indigene Blue R 125 per cent.....	I		
A703	MORDANT BLUE 13707.....	I	441	
A704	ROSANTHRENE.....	I	304	225
A704	Rosanthrene AWL (S.; Kal. 1907; S. H. IV, 1602).....	I		
A705	Rosanthrene B.....	I		
A706	Rosanthrene CB.....	I		
A707	Rosanthrene R.....	I		
A708	ROSANTHRENE BORDEAUX B 400 per cent (S.; Kal. 1905).....	I	51	
A709	ROSANTHRENE ORANGE 16754 (S.; Kal. 1910).....	I	44	
A710	ROSANTHRENE VIOLET SR.....	I	20	
A711	AZO RHODINE 2 B (S.; Kal. 1912).....	S	10,102	
A712	CHLORAMINE RED B (S.; Kal. 1905; S. H. IV, 1584).....	S	221	
A713	CHLORAMINE VIOLET N (S. H. IV, 1731).....	S	110	
A714	COTTON GREEN D.....	S	2,205	
A715	CUTCH BROWN.....	S	641	225
A715	Cutch Brown R.....	S		
A715	Cutch Brown R conc.....	S		
A716	DIAMINE CATECHINE G (S. H. IV, 1785).....	S	2,159	
A717	DIRECT CATECHINE.....	S	1,222	451
A718	Direct Catechine G.....	S		
A718	Direct Catechine 30.....	S		
A719	DIRECT SKY BLUE.....	S	58,632	12,227
A719	Direct Sky Blue FF.....	S		
A719	Direct Sky Blue FF conc.....	S		
A720	Direct Sky Blue 22 conc. 5:10.....	S		
A721	PYRAZOLE ORANGE.....	S	1,254	305
A721	Pyrazole Orange G (S.; Kal. 1910, 1911).....	S		
A722	Pyrazole Orange R (S.; Kal. 1910, 1911).....	S		
A723	ACID CHROME BLACK 1551.....	CV	500	
A724	ACID CHROME BLUE B.....	CV	100	
A725	ACID CHROME RED N.....	CV	50	
A726	ANTHRACYL BLUE SWR.....	CV	1,200	
A727	AZOMINE BLACK FF extra.....	CV	1,500	
A728	AZOMINE FAST YELLOW AL.....	CV	300	
A729	AZOMINE MILLING BLACK N.....	CV	22,500	
A730	NITRO AZOMINE GREEN F.....	CV	100	
A731	PHENYL CRIMSON S.....	CV	4,800	
A732	COTTON CUTCH 21 A.....	Lev	1,004	
A733	CASHMERE BLACK MCS (S.).....	H	40	
A734	CHLORAZOL BRILLIANT BORDEAUX RH (Kal. 1914).....	H	300	
A735	CHLORAZOL BROWN.....	H	2,921	642
A735	Chlorazol Brown G 40 per cent (Kal. 1909).....	H		
A735	Chlorazol Brown G 50 per cent (Kal. 1909).....	H		
A736	Chlorazol Brown M 90 per cent STG (S.; Kal. 1908).....	H		
A737	Chlorazol Brown MAS (S.; Kal. 1908).....	H		

493	AURAMINE.....1883	449, 276	\$107, 887
	Hydrochloride of imido-tetramethyl-diamido-diphenyl-methane.		
	HN-C $\left\{ \begin{array}{l} [1]C_6H_4[4]N(CH_3)_2 \\ [1]C_6H_4[4]N(CH_3)_2HCl \end{array} \right.$		
	Auramine conc.....	B	
	Auramine OEA.....	B	
	Auramine OOD.....	B	
	Auramine OOD extra.....	B	
	Auramine OOD 142}.....	B	
	Auramine OOD 233}.....	B	
	Auramine OOD 232}.....	B	
	Auramine conc.....	B	
	Auramine O.....	By	
	Auramine base.....	By	
	Auramine OOD.....	K	
	Auramine OO 3.....	K	
	Auramine OO 4.....	K	
	Auramine 23112.....	K	
	Auramine conc.....	M	



## VI. DIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
493	AURAMINE—Continued. Auramine extra..... Auramine extra conc..... Auramine extra..... Auramine OO (801)..... Auramine OO (445)..... Auramine OO (446)..... Auramine OOP..... Auramine extra conc..... Auramine N conc. powder 29727..... Auramine N conc. powder 80 per cent..... Auramine N conc. powder 65 per cent..... Auramine N conc. powder 60 per cent..... Auramine N conc. powder 9 per cent..... Auramine.....	tM AW AW G G G I S S S S S H		
494	AURAMINE G.....1832 Hydrochloride of imido-dimethyl-diamido-ditolyl-methane.  $\text{HN}=\text{C} \begin{Bmatrix} [\text{I}]\text{C}_6\text{H}_4 \begin{Bmatrix} 3\text{CH}_3 \\ 4\text{NH}(\text{CH}_3)\text{HCl} \end{Bmatrix} \\ [\text{I}]\text{C}_6\text{H}_4 \begin{Bmatrix} 3\text{CH}_3 \\ 4\text{NH}(\text{CH}_3) \end{Bmatrix} \end{Bmatrix}$ Auramine G..... Auramine G.....	       tM I	1,902	\$1,036

## VII. TRIPHENYLMETHANE AND DIPHENYL-NAPHTHYL-METHANE COLORING MATTERS.

A. TRIPHENYLMETHANE COLORS.			
1. Diamido derivatives.			
495	MALACHITE GREEN.....1877	178, 831	943, 363
	Zinc double chloride, oxalate, ferric double chloride of tetramethyl-di-p-amido-triphenyl-carbinol.		
	<i>Hydrochloride:</i>		
	$\text{C}_6\text{H}_5-\text{C}\left\{\begin{array}{l} -[\text{C}_6\text{H}_4(4)-\text{N}(\text{CH}_3)_2 \\ -[\text{C}_6\text{H}_4(4)-\text{N}(\text{CH}_3)_2\text{Cl} \end{array}\right.$		
	<i>Zinc double chloride:</i> $(\text{C}_{20}\text{H}_{20}\text{N}_2\text{Cl})_2 + 2\text{ZnCl}_2 + 2\text{H}_2\text{O}$		
	<i>Oxalate:</i> $(\text{C}_{20}\text{H}_{20}\text{N}_2)_2(\text{C}_2\text{H}_2\text{O}_4)_2$		
	Diamond Green B crystals.....	B	
	Diamond Green B powder.....	B	
	Diamond Green B X.....	B	
	Malachite Green B X.....	B	
	Solid Green A 218. (Current marks, A, 4 B, J, O, OO.).....	C	
	Solid Green 23 O 1143.....	C	
	Solid Green V 428.....	C	
	Malachite Green crystals NN.....	K	
	Malachite Green P.....	K	
	Malachite Green powder 2639.....	K	
	Malachite Green base.....	M	
	Malachite Green IA 4 B.....	M	
	Malachite Green crystals extra MS.....	M	
	Malachite Green crystals extra MS 15 per cent red.....	M	
	Malachite Green crystals extra MS 30 per cent red.....	M	
	Malachite Green extra yellow N.....	M	
	Malachite Green superfine powder.....	M	
	Malachite Green salt 10.....	CJ	
	Malachite Green Z powder.....	CJ	
	Malachite Green powder.....	tM	
	Green Crystals E.....	tM	
	Green Crystals M.....	tM	
	Malachite Green crystals.....	tM	
	Malachite Green crystals extra.....	AW	
	Malachite Green crystals 80 per cent.....	AW	
	Malachite Green crystals extra conc.....	G	
	Green Crystals F 10 per cent.....	H	
	Green Crystals YD.....	H	

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
495a	GREEN (V. M.)..... Green A..... Green HD..... Green 15825.....	H H H	5,021	\$396
496	SETOGLAUCINE.....1896 Hydrochloride of tetramethyl-diamido-o-chloro-triphenyl-carbinol.	G	0	
497	NEW FAST GREEN 3 B.....1878 Hydrochloride or zinc double chloride of tetramethyl-diamido-dichloro-triphenyl-carbinol.  <i>Hydrochloride:</i> $C_6H_5Cl_2-C\left\{\begin{array}{l} [1]C_6H_4[4]N(CH_3)_2 \\ [1]C_6H_4[4]N(CH_3)_2 \end{array}\right\}Cl$	I	0	
497a	VICTORIA GREEN (V. M.)..... Victoria Green extra conc. crystals..... Victoria Green extra conc. powder..... Victoria Green Base..... Victoria Green BF..... Victoria Green 4833..... Victoria Green 4834..... Victoria Green Base fine powder..... Victoria Green crystals.....	B B B B By By tM tM	44,595	10,305
498	TURQUOISE BLUE.....1894 Tetramethyl-diamido-p-nitro-tolyl-diphenyl-carbinol.  $HO-C\left\{\begin{array}{l} [1]C_6H_4[4]N(CH_3)_2 \\ C_6H_5[1]CH_3 \\ [1]C_6H_4[4]NO_2 \\ [1]C_6H_4[4]N(CH_3)_2 \end{array}\right\}$ Turquoise Blue G..... Turquoise Blue.....	By Q	1,541	2,550
499	BRILLIANT GREEN..... Sulphate or zinc double chloride (rarely oxalate) of tetraethyl-diamido-triphenyl-carbinol.  <i>Sulphate:</i> $C_6H_5-C\left\{\begin{array}{l} [1]C_6H_4[4]N(C_2H_5)_2 \\ [1]C_6H_4[4]N(C_2H_5)_2 \end{array}\right\}SO_4H$ Diamond Green G 3114..... Diamond Green GF..... Diamond Green GN..... Brilliant Green extra crystals..... Brilliant Green D 221..... Brilliant Green crystals extra 1440..... Brilliant Green crystals extra..... Brilliant Green crystals..... Brilliant Green crystals extra 15 per cent red..... Brilliant Green crystals extra 30 per cent red..... Brilliant Green S crystals..... Brilliant Green PND..... Brilliant Green crystals..... Brilliant Green B conc..... Brilliant Green B powder..... Brilliant Green BN crystals..... Brilliant Green crystals 34 extra conc..... Brilliant Green crystals T 1830..... Brilliant Green crystals 27 B..... Brilliant Green crystals T 7662..... Brilliant Green crystals..... Solid Green 3 G.....	B B B By C K K M M M CJ GrE tM tM tM tM tM tM tM tM AW Q	73,904	16,345
500	SETOCYANINE..... Hydrochloride of diethyl-diamido-o-chloro-phenyl-ditolyl-carbinol.  $Cl[2]C_6H_4[1]-C\left\{\begin{array}{l} [1]C_6H_5\left\{\begin{array}{l} [3]CH_3 \\ [4]NH(C_2H_5) \end{array}\right\} \\ [1]C_6H_5\left\{\begin{array}{l} [3]CH_3 \\ [4]NH(C_2H_5) \end{array}\right\} \end{array}\right\}Cl$ Setocyanine..... Setocyanine conc..... Setopaline conc.....	G G G	923	923

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
501	BRILLIANT GLACIER BLUE.....1892 Zinc double chloride of dimethyl-diamido-di-o-tolyl-dichloro-phenyl-carbinol.  <i>Hydrochloride:</i> $\begin{array}{c} \text{CH}_3 \\ \text{CH}_3 \end{array} \left\{ \begin{array}{c} \text{C}_6\text{H}_4 \\ \text{C}_6\text{H}_4 \end{array} \right\} \text{N}-\text{C} \begin{array}{c} \left\{ \begin{array}{c} \text{CH}_3 \\ \text{NH} \end{array} \right\} \text{CH}_3 \\ \left\{ \begin{array}{c} \text{CH}_3 \\ \text{NHCH}_2\text{Cl} \end{array} \right\} \end{array}$	I	2,495	
502	GUINEA GREEN.....1883 Sodium salt of diethyl-dibenzyl-diamido-triphenyl-carbinol-disulphonic acid.  $\text{HO}-\text{C} \begin{array}{c} \left\{ \begin{array}{c} \text{C}_6\text{H}_5 \\ \text{C}_6\text{H}_5 \end{array} \right\} \text{N}(\text{C}_2\text{H}_5) \cdot \text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2\text{Na} \\ \left\{ \begin{array}{c} \text{C}_6\text{H}_5 \\ \text{C}_6\text{H}_5 \end{array} \right\} \text{N}(\text{C}_2\text{H}_5) \cdot \text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2\text{Na} \end{array}$ Guinea Green B..... Guinea Green B extra..... Guinea Green G extra..... Guinea Green G extra 80:100..... Acid Green 2 B.....	A A A A P	14,000	\$2,362
502a	ACID GREEN (V. M.)..... Acid Green extra conc. 19223 III..... Acid Green 2 A extra conc. powder..... Acid Green B powder conc..... Acid Green B..... Acid Green 2 B A extra..... Acid Green 2 BA extra conc.....	tM tM tM tM tM tM	25,365	9,397
503	NEPTUNE GREEN.....1830 Sodium salt of chloro-diethyl-dibenzyl-diamido-triphenyl-carbinol-disulphonic acid.  $\text{CH}_3 \left\{ \begin{array}{c} \text{C}_6\text{H}_4 \\ \text{C}_6\text{H}_4 \end{array} \right\} \text{N}-\text{C} \begin{array}{c} \left\{ \begin{array}{c} \text{CH}_3 \\ \text{OH} \end{array} \right\} \text{CH}_3 \\ \left\{ \begin{array}{c} \text{CH}_3 \\ \text{CH}_3 \end{array} \right\} \end{array}$ Neptune Green SAX..... Neptune Green SBL (S.; R. 51)..... Neptune Green SGX..... Brilliant Acid Green 6 B..... Brilliant Milling Green B..... Milling Green BW..... Night Green A extra powder..... Night Green A extra conc. powder..... Erioviridine B superfine..... Benzyl Green B..... Benzyl Green B conc. 7 per cent.....	B B B By C L tM tM G I I	40,865	12,825
503a	FAST ACID GREEN RH (S.; Kal. 1909).....	H		
504	LIGHT GREEN (bluish).....1879 Sodium salt of dimethyl-dibenzyl-diamido-triphenyl-carbinol-trisulphonic acid.  $\text{HO}-\text{C} \begin{array}{c} \left\{ \begin{array}{c} \text{C}_6\text{H}_5 \\ \text{C}_6\text{H}_5 \end{array} \right\} \text{N}(\text{CH}_3) \cdot \text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2\text{Na} \\ \left\{ \begin{array}{c} \text{C}_6\text{H}_5 \\ \text{C}_6\text{H}_5 \end{array} \right\} \text{N}(\text{CH}_3) \cdot \text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2\text{Na} \end{array}$ Light Green SF (bluish) II..... Acid Green.....	B I	6,693	197
505	LIGHT GREEN (yellowish).....1879 Sodium salt of diethyl-dibenzyl-diamido-triphenyl-carbinol-trisulphonic acid.  $\text{HO}-\text{C} \begin{array}{c} \left\{ \begin{array}{c} \text{C}_6\text{H}_5 \\ \text{C}_6\text{H}_5 \end{array} \right\} \text{N}(\text{C}_2\text{H}_5) \cdot \text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2\text{Na} \\ \left\{ \begin{array}{c} \text{C}_6\text{H}_5 \\ \text{C}_6\text{H}_5 \end{array} \right\} \text{N}(\text{C}_2\text{H}_5) \cdot \text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2\text{Na} \end{array}$ Guinea Green 2 G..... Light Green SF (yellow shade)..... Light Green SF yellow shade XX..... Light Green SL..... Acid Green GG..... Acid Green GG conc..... Acid Green G conc..... Acid Green conc. 207.....	A B B B By By K WD	24,946	5,900

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
505a	ACID GREEN (V. M.)..... Acid Green 33 A 1390. (Current mar., B, 421, 780.)..... Acid Green H 225..... Acid Green K 227..... Acid Green B..... Acid Green CH extra..... Acid Green K..... Acid Green K extra..... Acid Green conc..... Acid Green AS conc..... Acid Green 2 GN powder extra conc..... Acid Green 2 NG extra powder..... Acid Green 2 Y extra conc. powder..... Acid Green yellowish..... Acid Green S 300 per cent..... Acid Green GK 15 per cent strong..... Acid Green RX..... Acid Green X 15825..... Acid Green 74C14..... Acid Green BX..... Acid Green G.....	C C C K K K K M M tM tM tM tM AW H H H H Q Q	48,461	\$20,176
505b	ACID DARK GREEN.....	I	55	
506	ERIOGLAUCINE.....1896 Acid ammonium salt of the trisulphonic acid of diethyl-diben- zyl-diamido-triphenyl-carbinol $\text{HO}-\text{C} \begin{Bmatrix} [1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)\text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2\text{NH}_4 \\ [1]\text{C}_6\text{H}_4[4]\text{SO}_2\text{NH}_4 \\ [1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)\text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2\text{NH}_4 \end{Bmatrix}$ Erioglaucine superfine..... Erioglaucine AF..... Erioglaucine EP..... Erioglaucine X high conc..... Erioglaucine 49141.....	G G G G H	66,536	23,971
507	XYLENE BLUE VS.....1902 Sodium salt of the disulphonic acid of tetraethyl-diamido- diphenyl-tolyl-carbinol. $\text{HO}-\text{C} \begin{Bmatrix} [1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)_2 \\ [2]\text{SO}_2\text{Na} \\ [1]\text{C}_6\text{H}_4[5]\text{CH}_3 \\ [4]\text{SO}_2\text{Na} \\ [1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)_2 \end{Bmatrix}$ Xylene Blue VS (Kal. 1907, 1913)..... Xylene Blue VS conc. 7:10 (Kal. 1905).....	S S	2,120	807
508	XYLENE BLUE AS.....1902 Sodium salt of the disulphonic acid of diethyl-dibenzyl-di- amido-diphenyl-tolyl-carbinol. $\text{HO}-\text{C} \begin{Bmatrix} [1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)\text{CH}_2 \cdot \text{C}_6\text{H}_4 \\ [2]\text{SO}_2\text{Na} \\ [1]\text{C}_6\text{H}_4[5]\text{CH}_3 \\ [4]\text{SO}_2\text{Na} \\ [1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)\text{CH}_2 \cdot \text{C}_6\text{H}_4 \end{Bmatrix}$ Xylene Blue AS (Kal. 1907)..... Xylene Blue AS conc..... Xylene Blue AS conc. 5:10..... Xylene Blue ASL conc. 5:10 (Kal. 1909)..... Xylene Blue BS conc. 7:10.....	S S S S S	3,223	4,323
509	CHROME GREEN.....1890 Tetramethyl-diamido-triphenyl-carbinol-m-carboxylic acid.	By	0	
510	AZO GREEN.....1888 Tetramethyl-diamido-triphenyl-carbinol-azo-salicylic acid.	By	0	
	2. Triamido derivatives.			
511	PARA-FUCHSINE.....1858 Hydrochloride of pararosaniline. Hydrochloride of triamido- triphenyl-carbinol.	GrE	65,023	

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
512	<p><b>MAGENTA</b>.....1856</p> <p>Mixture of hydrochloride or acetate of pararosaniline (tri-amido-triphenyl-carbinol) and rosaniline (triamido-diphenyl-tolyl-carbinol).</p> <p><i>Hydrochlorides:</i></p> $C \begin{cases} [-1]C_6H_4[4]NH_2 \\ [-1]C_6H_4[4]NH_2 \\ [-1]C_6H_4[4]:NH_2Cl \end{cases} + 4H_2O$ <p style="text-align: center;">and</p> $C \begin{cases} [-1]C_6H_4[3]CH_2 \\ [-1]C_6H_4[4]NH_2 \\ [-1]C_6H_4[4]:NH_2Cl \end{cases} + 4H_2O$ <p>Rubine small crystals.....</p> <p>Rubine small crystals powder.....</p> <p>Rubine N crystals.....</p> <p>Russian Leather Red R.....</p> <p>Cerise D IV.....</p> <p>Cerise DN lumps.....</p> <p>Magenta (acetate).....</p> <p>Magenta A powder.....</p> <p>Magenta AB powder.....</p> <p>Magenta L.....</p> <p>Magenta S.....</p> <p>Maroon.....</p> <p>Cerise N.....</p> <p>Fuch sine 76712 J.....</p> <p>Magenta B.....</p> <p>Russia Red 57 L 1992. (Current marks, B, G.).....</p> <p>Magenta crystals.....</p> <p>Magenta crystals 81076.....</p> <p>Magenta 1653 powder.....</p> <p>New Magenta O.....</p> <p>Fuch sine I small crystals (S.).....</p> <p>Cerise M.....</p> <p>Fuch sine powder.....</p> <p>Fuch sine B powder.....</p> <p>Fuch sine MB crystals.....</p> <p>Fuch sine MB powder.....</p> <p>Magenta crystals 3.....</p> <p>Magenta crystals 39708.....</p> <p>Magenta medium crystals.....</p> <p>Magenta crystals II.....</p> <p>Magenta TP powder.....</p> <p>Fuch sine ASV.....</p> <p>Aniline Red B conc.....</p> <p>Geranium B.....</p> <p>Roseine B.....</p> <p>Cardinal 3 B 1601.....</p> <p>Magenta FABS crystals.....</p> <p>Marron Cordu.....</p>		87,102	\$25,658
513	<p><b>NEW FUCHSINE</b>.....1889</p> <p>Hydrochloride of triamido-tritolyl-carbinol</p> $H_2C[3]C_6H_4[1]-C \begin{cases} [-1]C_6H_4[3]CH_2 \\ [-1]C_6H_4[4]NH_2 \\ [-1]C_6H_4[4]:NH_2Cl \end{cases}$ <p>New Fuch sine S.....</p> <p>New Magenta O.....</p>		300	
514	<p><b>RED VIOLET powder</b>.....1863</p> <p>Mixture of the hydrochlorides or acetates of the mono-di- or tri-methyl-(or ethyl)-rosanilines and pararosanilines.</p> <p><i>Hydrochloride of triethyl-rozaniline:</i></p> $C \begin{cases} [-1]C_6H_4[3]CH_2 \\ [-1]C_6H_4[4]NH(C_2H_5) \\ [-1]C_6H_4[4]:NH(C_2H_5)Cl \end{cases}$		331	

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
515	METHYL VIOLET.....1861		255,043	\$63,1253
	<i>Chiefly:</i>			
	Hydrochloride of penta- and hexa- methyl- <i>pararosaniline</i> .			
	$C \begin{cases} -[1]C_6H_4[4]N(CH_3)_3 \\ -[1]C_6H_4[4]N(CH_3)_2 \\ -[1]C_6H_4[4]NH(CH_3)Cl \end{cases}$			
	Methyl Violet base.....	B		
	Methyl Violet B extra.....	B		
	Methyl Violet BB.....	B		
	Methyl Violet BB extra.....	B		
	Methyl Violet N.....	B		
	Methyl Violet NY 147.....	B		
	Methyl Violet 5 RO.....	B		
	Methyl Violet IB.....	By		
	Methyl Violet IBA.....	By		
	Methyl Violet 5 R.....	By		
	Methyl Violet 3 L 206. (Current marks, BI, 2 BI, 3 BI, 4 BI, 5 BI, 6 BI, BO, 2 BO, 4 BO, 5 BO, 6 BO, J, RT, 2 RI, 3 RI, 4 RI, RO, RRO.)	C		
	Methyl Violet 13 R 896.....	C		
	Methyl Violet 9 Y 803.....	C		
	Methyl Violet 129. (Current marks, 3 B, 4 B, 5 B, R, 2 R, 3 R, 4 R, V 2.)	K		
	Methyl Violet 2 B.....	K		
	Methyl Violet BB reddish.....	K		
	Methyl Violet base BB.....	K		
	Methyl Violet base 882.....	K		
	Methyl Violet BB extra conc.....	M		
	Methyl Violet 2 B chemically pure.....	M		
	Methyl Violet B-BBM.....	M		
	Methyl Violet 4 B 1808.....	M		
	Methyl Violet 6 B.....	M		
	Methyl Violet R.....	M		
	Methyl Violet 3 R.....	M		
	Methyl Violet 3 R superior.....	M		
	Methyl Violet 5 R.....	M		
	Methyl Violet 4 BOATN.....	Gre		
	Methyl Violet powder.....	tM		
	Methyl Violet B extra conc.....	tM		
	Methyl Violet BIA powder.....	tM		
	Methyl Violet 2 B extra.....	tM		
	Methyl Violet 2 B 42406.....	tM		
	Methyl Violet 2 B extra conc.....	tM		
	Methyl Violet 2 B extra conc. SO.....	tM		
	Methyl Violet 2 BIA.....	tM		
	Methyl Violet 2 BP.....	tM		
	Methyl Violet 2 BN.....	tM		
	Methyl Violet 3 B.....	tM		
	Methyl Violet 3 BIA.....	tM		
	Methyl Violet 3 BHN.....	tM		
	Methyl Violet 4 B.....	tM		
	Methyl Violet 5 B powder.....	tM		
	Methyl Violet 5 B 42.....	tM		
	Methyl Violet 5 BIA.....	tM		
	Methyl Violet 6 BN.....	tM		
	Methyl Violet 7 B.....	tM		
	Methyl Violet 7 B 40.....	tM		
	Methyl Violet DB base.....	tM		
	Methyl Violet R powder.....	tM		
	Methyl Violet RIA.....	tM		
	Methyl Violet 5 R powder.....	tM		
	Methyl Violet 5 RA powder.....	tM		
	Methyl Violet 3 R.....	tM		
	Paris Violet.....	P		
	Paris Violet 90.....	P		
	Paris Violet 3 B.....	P		
	Paris Violet 6 B.....	P		
	Paris Violet 3 BA.....	P		
	Paris Violet 4 BA.....	P		
	Paris Violet 4 R.....	P		
	Methyl Violet B extra conc.....	G		
	Methyl Violet 2 B extra conc.....	G		
	Methyl Violet base 74418.....	H		
	Methyl Violet 5 R powder.....	Q		

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
516	CRYSTAL VIOLET.....1883 Hydrochloride of hexamethyl-pararosaniline. $\begin{array}{l} \text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_3 \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_3 \\ -[1]\text{C}_6\text{H}_4[4]-\text{N}(\text{CH}_3)_3\text{Cl} \end{cases} \end{array}$ Crystal Violet 6 B powder..... Crystal Violet..... Crystal Violet extra..... Crystal Violet CV extra..... Crystal Violet 16 W 976. (Current marks, 5 B, 10 B.)..... Violet Crystals..... Violet Crystals 142 S..... Violet Crystals O..... Crystal Violet crystals..... Crystal Violet powder..... Crystal Violet powder..... Crystal Violet crystals..... Crystal Violet 484 powder..... Violet Crystals 6 BO..... Crystal Violet.....	A B B B C K K M tM tM AW AW I I S	23, 653	\$13, 664
516a	VIOLET (V. M.)..... Violet 2 B..... Violet neutral O..... Violet base 5747..... Violet 2 B..... Violet NX..... Violet 9 O..... Violet 300 XE..... Violet 55396..... Violet base 2 B..... Violet DV conc.....	K M BK tM AW P P H Q Q	12, 219	5, 239
517	BENZYL VIOLET.....1896 Chiefly a mixture of the hydrochlorides of benzyl-pentamethyl- pararosaniline and hexamethyl-pararosaniline. <i>Benzyl-pentamethyl-pararosaniline hydrochloride:</i> $\begin{array}{l} \text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]-\text{N}(\text{CH}_3)_3\text{Cl} \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_3 \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)(\text{CH}_3 \cdot \text{C}_6\text{H}_5) \end{cases} \end{array}$ Methyl Violet 6 B extra..... Methyl Violet 5 B..... Methyl Violet 7 B..... Methyl Violet base 7 B..... Benzyl Violet 4 B..... Benzyl Violet 4 B 3 per cent..... Benzyl Violet 6 B..... Violet 6 B.....	B By By BK I I I I Q	22, 387	6, 012
518	ETHYL PURPLE.....1883 Hydrochloride of hexaethyl-pararosaniline. $\begin{array}{l} \text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)_3 \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)_3 \\ -[1]\text{C}_6\text{H}_4[4]-\text{N}(\text{C}_2\text{H}_5)_3\text{Cl} \end{cases} \end{array}$ Ethyl Violet..... Ethyl Purple..... Ethyl Purple conc..... Ethyl Violet (chem. pure)..... Ethyl Violet 8682..... Light Green 2 A powder extra conc.....	B B B M I tM	51, 933	23, 161
519	METHYL GREEN.....1871 Zinc double chloride of heptamethyl-pararosaniline-chloride.	P	0	
520	DIPHENYLAMINE BLUE.....1866 Hydrochloride of triphenyl-pararosaniline. $\begin{array}{l} \text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]\text{NH} \cdot \text{C}_6\text{H}_5 \\ -[1]\text{C}_6\text{H}_4[4]\text{NH} \cdot \text{C}_6\text{H}_5 \\ -[1]\text{C}_6\text{H}_4[4]-\text{NHC}_6\text{H}_5\text{Cl} \end{cases} \end{array}$	DH	0	

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
520a	AZURINE B conc. (S.; S. J., 2d ed., 296; an impure triphenyl-p-rosaniline hydrochloride, obtained from aniline and rosolic acid).....	I	2, 149	
521	ANILINE BLUE.....1860 Hydrochloride, sulphate, or acetate of triphenyl-roaniline and triphenyl-pararosaniline. <i>Hydrochloride:</i> $\begin{array}{c} \left( \begin{array}{l} -[1]C_6H_4[4]NH \cdot C_6H_5 \\ -[1]C_6H_4[4]NH \cdot C_6H_5 \\ -[1]C_6H_4[4]-NHC_6H_5Cl \end{array} \right) \\ \text{and} \\ \left( \begin{array}{l} -[1]C_6H_5(CH_3)[4]NH \cdot C_6H_5 \\ -[1]C_6H_4[4]NH \cdot C_6H_5 \\ -[1]C_6H_4[4]-NHC_6H_5Cl \end{array} \right) \end{array}$ Aniline Blue 2 B..... Blue (greenish) spirit soluble..... Opal Blue (blue shade)..... Spirit Blue R..... Aniline Blue 6416..... Aniline Blue B in grains..... Aniline Blue 3 B powder..... Aniline Blue RN in grains..... Light Blue powder..... Spirit Blue BVE.....	A M M M CG tM tM tM tM P	50, 543	\$12, 596
522	VICTORIA BLUE 4 R.....1883 Hydrochloride of $\alpha$ -naphthyl-pentamethyl-triamido-triphenyl-pararosaniline. $\begin{array}{c} \left( \begin{array}{l} -[1]C_6H_4[4]N(CH_3)_2 \\ -[1]C_6H_4[4]N(CH_3)_2 \\ -[1]C_6H_4[4]-N(CH_3)(C_{10}H_7)Cl \end{array} \right) \end{array}$ Victoria Blue 4 R..... Victoria Blue 4 R conc..... Victoria Blue 4 R 125 per cent.....	B tM I	9, 599	2, 692
523	FAST GREEN.....1885 Sodium salt of tetramethyl-dibenzyl-pseudorosaniline-disulphonic acid. $HO-C \begin{array}{c} \left( \begin{array}{l} -[1]C_6H_4[4]N(CH_3)_2 \\ -[1]C_6H_4[4]N(CH_3)_2 \\ -[1]C_6H_4[3]N(CH_3 \cdot C_6H_5 \cdot SO_2Na)_2 \end{array} \right) \end{array}$ Fast Green CR..... Fast Green bluish..... Fast Green bluish extra.....	By By By	9, 745	2, 714
523a	FAST LIGHT GREEN (S. 1895).....	By	4, 162	
523b	MILLING GREEN (V. M.)..... Milling Green DB..... Milling Green DS.....	AW AW	440	120
524	ACID MAGENTA.....1877 Mixture of the sodium or ammonium salts of the trisulphonic acids of rosaniline and pararosaniline. $HO-C \begin{array}{c} \left( \begin{array}{l} -[1]C_6H_5 \left( \begin{array}{l} [4]NH_2 \\ SO_2Na \end{array} \right) \\ -[1]C_6H_5 \left( \begin{array}{l} [4]NH_2 \\ SO_2Na \end{array} \right) \\ -[1]C_6H_5 \left( \begin{array}{l} [4]NH_2 \\ SO_2Na \end{array} \right) \end{array} \right) \\ \text{and} \\ \left( \begin{array}{l} -[1]C_6H_5 \left( \begin{array}{l} [4]NH_2 \\ SO_2Na \end{array} \right) \\ -[1]C_6H_5 \left( \begin{array}{l} [4]NH_2 \\ SO_2Na \end{array} \right) \\ -[1]C_6H_5 \left( \begin{array}{l} [3]CH_3 \\ [4]NH_2 \\ SO_2Na \end{array} \right) \end{array} \right) \end{array}$		19, 098	4, 629



## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
524	ACID MAGENTA—Continued.			
	Acid Magenta S.....	A		
	Acid Magenta S extra.....	A		
	Acid Magenta S.....	B		
	Acid Magenta.....	By		
	Acid Magenta.....	C		
	Acid Magenta O.....	M		
	Acid Rubine.....	CI		
	Acid Magenta FCNS.....	GRE		
	Acid Magenta S.....	GRE		
	Acid Magenta B 50 cryst.....	G		
	Acid Magenta F extra.....	G		
	Acid Magenta G conc. cryst.....	G		
	Acid Magenta 6 B.....	CV		
	Acid Magenta Crystals I.....	CV		
	Acid Magenta 2.....	CV		
	Acid Magenta 15 per cent.....	H		
	Acid Magenta 1244.....	H		
525	RED VIOLET 5 RS.....1877	B	0	
	Sodium salt of ethylrosaniline-sulphonic acid.			
526	ACID VIOLET 4 RS.....1877	M	0	
	Sodium salt of dimethyl-rosaniline-trisulphonic acid.			
527	ACID VIOLET 4 BN.....1883		13, 078	\$4, 362
	Sodium salt of benzyl-pentamethyl-triamido-triphenyl-carbinol-trisulphonic acid.			
	$\text{HO}-\text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)[3]\text{SO}_3\text{Na} \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)[3]\text{SO}_3\text{Na} \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)\text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_3\text{Na} \end{cases}$			
	Acid Violet 4 BN.....	B		
	Acid Violet 6 BNB.....	By		
	Acid Violet 7 BN (S.; Kal. 1912, 1913).....	By		
	Acid Violet 7 B conc.....	AW		
	Acid Violet 4 BNS (S. 1906).....	S		
	Acid Violet 4 BNS conc.....	S		
527a	ACID VIOLET (V. M.).....		16, 106	5, 300
	Acid Violet BW (S. 1903).....	By		
	Acid Violet HW.....1891	By		
	Acid Violet 8 B extra (S.).....1896	By		
	Acid Violet R extra.....	By		
	Acid Violet 4 R.....	By		
	Acid Violet 4 R 25649.....	By		
528	FAST ACID VIOLET 10 B.....1892	By	12, 919	
	Sodium salt of benzyl-ethyl-tetramethyl-pararosaniline-disulphonic acid.			
	$\text{HO}-\text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_2 \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_2 \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)_2 \end{cases} \begin{cases} 2\text{SO}_3\text{Na} \\ 2\text{SO}_3\text{Na} \\ 2\text{SO}_3\text{Na} \end{cases}$			
529	ACID VIOLET 6 B.....1889	A	0	
	Sodium salt of dimethyl-dibenzyl-triamido-triphenyl-carbinol-disulphonic acid.			
530	ACID VIOLET.....1890		50, 055	12, 806
	Sodium salt of tetraethyl-dibenzyl-triamido-triphenyl-carbinol-disulphonic acid.			
	$\text{HO}-\text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)_2\text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_3\text{Na} \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)_2 \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)_2\text{CH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_3\text{Na} \end{cases}$			
	Guinea Violet S 4 B.....	A		
	Acid Violet 4 BC.....	B		
	Acid Violet 4 BC conc.....	B		
	Acid Violet 4 B extra.....	By		
	Acid Violet 5 B.....	By		
	Acid Violet 6 B extra conc.....	tM		
	Acid Violet 6 BN.....	tM		
	Acid Violet 6 BN conc.....	tM		
	Acid Violet 5 B extra.....	AW		
	Acid Violet 6 B.....	G		
	Acid Violet 6 BNG 553.....	G		
	Acid Violet 4 BB.....	Q		
	Acid Violet 4 B.....	Q		

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
530a	ACID VIOLET (V. M.).....		65,395	\$20,954
	Acid Violet BB.....	B		
	Acid Violet 4 BL.....	B		
	Acid Violet 4 BLO.....	B		
	Acid Violet 3 BNO.....	B		
	Acid Violet 6 BNO.....	B		
	Acid Violet C 2 B (S. 1904).....	B		
	Acid Violet C 10 B (S. 1909, 1912).....	B		
	Acid Violet PW.....	B		
	Acid Violet 4 R (S.; gives preparation).....	B		
	Acid Violet SA 487. (Current marks, 6 BC, 6 BS, 4 RS.).....	C		
	Acid Violet 41 A 1580.....	C		
	Acid Violet 20 M 1066.....	C		
	Acid Violet 2 B.....	K		
	Acid Violet 4 B extra.....	K		
	Acid Violet 5 B.....	K		
	Acid Violet 7 B extra.....	K		
	Acid Violet 4 BLOO.....	K		
	Acid Violet 6 BNOO.....	K		
	Acid Violet BSC.....	K		
	Acid Violet KB.....	K		
	Acid Violet 4 RN 405.....	K		
	Acid Violet NG.....	K		
	Acid Violet 1704.....	K		
	Acid Violet 5 BF (S.; a triphenylmethane compound).....	M		
	Acid Violet B.....	BK		
	Acid Violet 4746.....	BK		
	Acid Violet 2405.....	tM		
	Acid Violet 4 BV.....	AW		
	Acid Violet C 10 B (S.).....	AW		
	Acid Violet 5 B conc. (S. 1910).....	G		
	Acid Violet R superfine.....	G		
	Acid Violet R.....	Q		
	Acid Violet SB.....	Q		
530b	FORMYL VIOLET.....		19,819	4,185
	Formyl Violet 43 L 1640. (Current marks, 4 B, 6 B, 8 B, 10 B, 5 BN, HW, 8 4 B, 8 5 B.).....	C		
	Formyl Violet 666 M.....	C		
	Formyl Violet 3 P 210.....	C		
	Formyl Violet 5 S 504.....	C		
530c	GUINEA VIOLET (V. M.).....		13,854	5,114
	Guinea Violet 4 B.....	A		
	Guinea Violet 6 B (S.; Kal. 1908).....	A		
530d	WOOL BLUE (V. M.).....		1,501	713
	Wool Blue SDOO (S.; a mixture of Acid Violet and Acid Green).....1890	B		
	Wool Blue SLOO (S.; a mixture of Acid Violet and Acid Green).....1890	B		
531	ERIOCYANINE.....1895		25,091	11,987
	Sodium salt of tetramethyl-dibenzyl-rosaniline-disulphonic acid.			
	$\text{HO}-\text{C} \begin{cases} -[\text{1}]\text{C}_6\text{H}_5[\text{4}]\text{N}(\text{CH}_3)_2 \\ -[\text{1}]\text{C}_6\text{H}_4[\text{4}]\text{N}(\text{CH}_3)_2 \\ -[\text{1}]\text{C}_6\text{H}_3[\text{2}]\text{SO}_2\text{Na} \\ -[\text{1}]\text{C}_6\text{H}_3[\text{4}]\text{N}(\text{CH}_3 \cdot \text{C}_6\text{H}_5)_2 \end{cases}$			
	Eriocyanine AC.....	G		
	Eriocyanine R superfine (Kal. 1914).....	G		
532	ALKALI VIOLET.....1896		3,020	1,277
	Sodium salt of tetraethyl-monomethyl-phenyl-pararosaniline-sulphonic acid.			
	$\text{HO} \cdot \text{C} \begin{cases} -[\text{1}]\text{C}_6\text{H}_4[\text{4}]\text{N}(\text{C}_2\text{H}_5)_2 \\ -[\text{1}]\text{C}_6\text{H}_4[\text{4}]\text{N}(\text{C}_2\text{H}_5)_2 \\ -[\text{1}]\text{C}_6\text{H}_4[\text{4}]\text{N}(\text{CH}_3) \\ -[\text{1}]\text{C}_6\text{H}_4[\text{4}]\text{N}(\text{C}_6\text{H}_5) \cdot \text{SO}_2\text{Na} \end{cases}$			
	Alkali Violet 6 BO.....	B		
	Alkali Violet.....	K		
	Alkali Violet 421.....	K		
	Alkali Violet AS extra paste.....	K		
	Alkali Violet AS 24 extra 3 per cent paste.....	M		

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
533	ACID VIOLET 7 BN.....1885 Sodium salt of tetramethyl-diphenyl-pararosaniline-disul- phonic acid.	M	0	
534	ACID VIOLET 7 B.....1884 Sodium salt of diethyl-dimethyl-diphenyl-triamido-triphenyl- carbinol-disulphonic acid. $\text{HO} \cdot \text{C} \begin{cases} -[\text{C}_6\text{H}_4(4\text{N}(\text{C}_2\text{H}_5)_2) \\ -[\text{C}_6\text{H}_4(4\text{N}(\text{CH}_3)\text{C}_6\text{H}_4 \cdot \text{SO}_2\text{Na} \\ -[\text{C}_6\text{H}_4(4\text{N}(\text{CH}_3)\text{C}_6\text{H}_4 \cdot \text{SO}_2\text{Na} \end{cases}$ Acid Violet 7 B..... Acid Violet 7 B..... Acid Violet 7 B extra.....	B I H	1,705	\$388
534a	ACID VIOLET (V. M.)..... Acid Violet 4 R (S.)..... Acid Violet 10471..... Acid Violet 10475..... Acid Violet 18502..... Acid Violet 2 B extra..... Acid Violet HB..... Acid Violet NFDS 20 per cent..... Acid Violet RX.....	I I I I H H H H	19,960	6,319
535	METHYL ALKALI BLUE.....1875 Sodium salt of triphenyl-pararosaniline-sulphonic acid. $\text{HO} \cdot \text{C} \begin{cases} -[\text{C}_6\text{H}_4(4\text{NHC}_6\text{H}_5) \\ -[\text{C}_6\text{H}_4(4\text{NHC}_6\text{H}_5) \cdot \text{SO}_2\text{Na} \\ -[\text{C}_6\text{H}_4(4\text{NHC}_6\text{H}_5) \end{cases}$ Alkali Blue D..... Methyl Alkali Blue.....	A B	273	217
536	ALKALI BLUE.....1882 Mixture of the sodium salts of triphenyl-rosaniline-sulphonic acid and triphenyl-pararosaniline-sulphonic acid. <i>Rosaniline derivative:</i> $\text{HO} \cdot \text{C} \begin{cases} -[\text{C}_6\text{H}_4(3\text{CH}_3) \\ -[\text{C}_6\text{H}_4(4\text{NH} \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2\text{Na} \\ -[\text{C}_6\text{H}_4(4\text{NHC}_6\text{H}_5) \\ -[\text{C}_6\text{H}_4(4\text{NHC}_6\text{H}_5) \end{cases}$ Alkali Blue III extra..... Alkali Blue I extra..... Alkali Blue 2 B..... Alkali Blue (for printing ink) 11408..... Alkali Blue 5 BA..... Alkali Blue BB..... Alkali Blue 5 BL..... Alkali Blue N (green shade)..... Alkali Blue N (red shade)..... Alkali Blue DD 55. (Current marks, B, 2 B, 3 B, 4 B, 5 B, 6 B, R, 2 R, 3 R.)..... Alkali Blue 44 D 1658..... Alkali Blue 38 O 1518..... Alkali Blue 38 P 1519..... Alkali Blue 25 Y 1203..... Alkali Blue BK 2..... Alkali Blue 1756..... Alkali Blue 1757..... Alkali Blue AWG..... Alkali Blue AWR..... Alkali Blue AWRG..... Alkali Blue 2 B..... Alkali Blue 4 B..... Alkali Blue MN..... Alkali Blue RM..... Alkali Blue RRM..... Alkali Blue 2 extra..... Alkali Blue 2 extra AS paste..... Alkali Blue IV extra A..... Alkali Blue 7 BOO..... Alkali Blue H 5 BKOOO..... Alkali Blue HEOOO..... Alkali Blue HHRROOO.....	A A A B B B B B B B C C C C C K K K M M M M M M M M M M M M M M GrE GrE GrE GrE	286,531	117,345

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
536	ALKALI BLUE—Continued. Alkali Blue 2 B conc. .... Alkali Blue 3 B ..... Alkali Blue 3 R ..... Alkali Blue 3 R conc. .... Alkali Blue 5 R ..... Alkali Blue 6 R ..... Alkali Blue (for printing ink) ..... Nicholson Blue 4 B ..... Alkali Blue (for printing ink) ..... Alkali Blue 4 B conc. 125 per cent. .... Alkali Blue R (green shade for lakes) ..... Alkali Blue 3 B ..... Alkali Blue .....	tM tM tM tM tM tM P G I I S Q		
536a	ALKALI BRILLIANT BLUE G conc. ....	WD	220	
537	METHYL BLUE FOR SILK ..... <sup>1862</sup> Sodium salt of triphenyl-pararosaniline-disulphonic acid with some trisulphonic acid. $\text{HO}-\text{C} \begin{cases} -[\text{HC}_6\text{H}_4]_4\text{NH} \cdot \text{C}_6\text{H}_5 \\ -[\text{HC}_6\text{H}_4]_4\text{NH} \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_3\text{Na} \\ -[\text{HC}_6\text{H}_4]_4\text{NH} \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_3\text{Na} \end{cases}$ Silk Blue B (R. 51; allied to Methyl Blue; preparation) ..... Silk Blue 4 ..... Methyl Blue for silk MLB ..... Methyl Blue MB8 ..... Methyl Blue powder ..... Navy Blue F ..... Navy Blue T .....	B By M GrE tM AW AW	2,885	\$1,517
537a	NAVY BLUE (V. M.) ..... Navy Blue SM ..... Navy Blue D ..... Navy Blue D ..... Navy Blue GR ..... Navy Blue 5 R ..... Dark Navy Blue 2035 .....	P I S CV CV Lev	31,490	6,275
537b	BLUE (V. M.) ..... Blue for silk RN ..... Blue RS .....	P P	252	140
537c	METHYL LYONS BLUE .....	G	55	
537d	METHYL SILK BLUE (new) .....	G	176	
538	BRILLIANT COTTON BLUE ..... <sup>1862</sup> Sodium salt of triphenyl-pararosaniline-trisulphonic acid. $\text{HO}-\text{C} \begin{cases} -[\text{HC}_6\text{H}_4]_4\text{NH} \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_3\text{Na} \\ -[\text{HC}_6\text{H}_4]_4\text{NH} \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_3\text{Na} \\ -[\text{HC}_6\text{H}_4]_4\text{NH} \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_3\text{Na} \end{cases}$ Brilliant Cotton Blue 17 extra (greenish) ..... Brilliant Cotton Blue 17 extra GR 28231 ..... Cotton Blue ..... Wool Blue 5 R 15 per cent. ....	By Rv WD H	4,276	1,025
538a	COTTON BLUE (V. M.) ..... Cotton Blue B5J ..... Cotton Blue 5190 ..... Cotton Blue 424 A ..... Cotton Blue 122 A ..... Cotton Blue 258 ..... Cotton Blue 347 ..... Cotton Blue 446 ..... Cotton Blue 511 ..... Cotton Blue 536 ..... Cotton Blue 2095 ..... Cotton Blue OOO ..... Cotton Blue BCB cryst .....	GrE PK Lev Lev Lev Lev Lev Lev Lev Lev Q Q	45,019	9,800
538b	WOOL BLUE (V. M.) ..... Wool Blue ..... Wool Blue S .....	Q Q Q	960 210 720	189 58 131

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manufacturer.	Importation.	
			Pounds.	Value.
539	SOLUBLE BLUE.....18c2 Sodium, ammonium or calcium salt of the trisulphonic acid (with some disulphonic acid) of triphenyl-rosaniline and triphenyl-pararosaniline.  <i>Rosaniline derivative, free acid:</i>  HO-C $\begin{cases} [-]C_6H_4[3]CH_3 \\ [-]C_6H_4[4]NH \cdot C_6H_4 \cdot SO_3H \\ [-]C_6H_4[4]NH \cdot C_6H_4 \cdot SO_3H \end{cases}$  China Blue powder..... Serge Blue crystals..... Water Blue S 2 K..... Water Blue 4215 extra..... Water Blue 32129..... Water Blue 67774 large lumps..... Water Blue 67774 large lumps new..... Water Blue 67774 large lumps S..... Water Blue 67775 large lumps new..... Water Blue 105370 lumps..... Soluble Blue II A..... Soluble Blue I N..... Soluble Blue 4 R..... Soluble Blue TB..... Soluble Blue TL..... Soluble Blue 3376 conc..... Soluble Blue 14108..... Soluble Blue 14710..... Soluble Blue 23413..... Pure Soluble Blue..... Water Blue L 38. (Current marks, B, BS, J, R, RB.)..... Soluble Blue CX. (Current marks, O, OO, I, II, III, IV, SR, S 2 R.)..... Soluble Blue C 2..... Soluble Blue C 3..... Soluble Blue C 5..... Soluble Blue 1185..... Soluble Blue 1195..... Soluble Blue 3235..... Soluble Blue 3237..... Concentrated Cotton Blue B..... Concentrated Cotton Blue 2..... Cotton Blue G conc..... Guernsey Blue O..... Soluble Blue RM..... Soluble Blue B conc..... Soluble Blue BCBI..... Soluble Blue AOOCO..... Soluble Blue BS 3 BB..... Soluble Blue BSJ..... Soluble Blue ELOOO..... Soluble Blue base SBXR..... Light Blue G..... Soluble Blue (greenest shade) conc. powder..... Soluble Blue extra..... Soluble Blue crystals..... Soluble Blue 5 R extra conc..... Soluble Blue 5 R double conc. powder..... Blue BS..... Soluble Blue 3 BS..... Soluble Blue BLSE..... Soluble Blue extra..... Pure Blue AI..... Pure Blue DSG powder..... Pure Blue DSG crystals..... Pure Blue DS extra..... Silk Blue B..... Silk Blue 4 R..... Water Blue MX.....	A A A A A A A A A A B B B B B B B B B B B B B B B B C K K K K K K K K M M M M CG CG GRE GRE GRE GRE GRE tm tm tm tm tm P P P G I H H H Q Q Q	88,523	\$31,003
539a	SILK BLUE (V. M.)..... Silk Blue BJBN OO..... Silk Blue BS 3 BB..... Silk Blue BTB..... Silk Blue BT 5 BOO..... Silk Blue BTR..... Silk Blue.....	GRE GRE GRE GRE GRE GRE tm	3,307	1,243

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
539b	PURE BLUE RT.....	BK	1, 102	
539c	SOLUBLE NAVY BLUE crystals.....	G	230	
540	PACIFIC BLUE.....1896 Sulphonation of the product obtained by the action of diamido- diphenyl-methane upon pararosaniline, in the presence of benzoic acid.	H	0	
541	BRILLIANT DIANIL BLUE 6 G.....1883 Sulphonation of $\beta$ -naphthyl-roaniline.	M	0	
542	AGALMA GREEN B.....1906 Sodium salt of di-nitro-sulpho-phenyl-tetramethyl-pararosaniline-sulphonic acid.  $\text{HO}-\text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_2 \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_2 \\ -[1]\text{C}_6\text{H}_4 \begin{cases} [2]\text{SO}_3\text{Na} \\ [4]\text{NH} \cdot [1]\text{C}_6\text{H}_4 \begin{cases} [2]\text{NO}_2 \\ [4]\text{SO}_2\text{Na} \\ [6]\text{NO}_2 \end{cases} \end{cases}$	B	2, 394	
3. Amido-oxy derivatives.				
543	PATENT BLUE.....1888 Calcium, magnesium or sodium salt of the disulphonic acid of m-oxy-tetra-ethyl-diamido-triphenyl-carbinol.  $\text{HO}-\text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)_2 \\ -[1]\text{C}_6\text{H}_4 \begin{cases} [3]\text{OH} \\ [4]\text{SO}_3\text{Na} \\ [6]\text{SO}_3\text{H} \end{cases} \\ -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{C}_2\text{H}_5)_2 \end{cases}$		114, 631	942, 945
	Patent Blue B.....	A		
	Neptune Blue BG.....	B		
	Neptune Blue BG extra.....	B		
	Neptune Blue BGN.....	B		
	Neptune Blue BGX.....	B		
	Brilliant Acid Blue V.....	By		
	Patent Blue B.....	M		
	Patent Blue L.....	M		
	Patent Marine Blue.....	M		
	Patent Blue LE.....	M		
	Patent Blue NO.....	M		
	Patent Blue V 15 per cent red.....	M		
	Patent Blue V new (S.; a mixture of Patent Blue B (M) with Acid Violet N).....	M		
	Patent Blue V.....	tM		
	Patent Blue V.....	G		
543a	PATENT BLUE (V. M.)..... Patent Blue JI 15 per cent red..... Patent Blue JI..... Patent Blue J 3..... Patent Blue J 3..... Patent Blue WE (S.; Kai. 1912).....	M M M M M	9, 500	2, 200
543b	PATENT MARINE BLUE LER (S. 1908; a modification of Patent Blue).....	M	51, 500	
543c	ACID BLUE (V. M.)..... Acid Blue..... Acid Blue F..... Acid Blue R..... Acid Blue V..... Acid Blue Y..... Acid Blue BA..... Acid Blue C..... Acid Blue DRS..... Acid Blue PN..... Acid Blue 5 R.....	AW AW AW AW AW Q Q Q Q Q	14, 467	4, 315
543d	TETRA CYANOLE (V. M.)..... Tetra Cyanole 27 G 1236. (Current marks, A, SF, V.)..... Tetra Cyanole 21 K 1089..... Tetra Cyanole 19 V 1050.....	C C C C	6, 130	2, 100

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
544	CYANINE B.....1891 Product of the oxidation of Patent Blue by means of chromic acid, etc., presumably accompanied by a loss of one or more ethyl groups. Cyanine B..... Cyanine BF..... Cyanine B.....	A A M	5,688	\$2,300
544a	CYANINE BLUE extra.....	CV	700	
545	PATENT BLUE A.....1888 Calcium salt of the disulphonic acid of m-oxy-diethyl-dibenzyl-diamido-triphenyl-carbinol. $\text{HO}-\text{C} \begin{cases} (-[\text{I}]\text{C}_6\text{H}_4[\text{4}]\text{N}(\text{C}_2\text{H}_5)\text{CH}_2 \cdot \text{C}_6\text{H}_5 \\ (-[\text{I}]\text{C}_6\text{H}_4[\text{4}]\text{N}(\text{C}_2\text{H}_5)\text{CH}_2 \cdot \text{C}_6\text{H}_5 \\ (-[\text{I}]\text{C}_6\text{H}_5 \begin{cases} [6]\text{SO}_2\text{H} \\ [4]\text{SO}_2\frac{1}{2}\text{Ca} \\ [3]\text{OH} \end{cases} \end{cases}$ Brilliant Acid Blue A..... Neptune Blue B..... Brilliant Acid Blue A..... Brilliant Acid Blue A conc..... Patent Blue A extra..... Patent Blue A..... Patent Blue A 15 per cent red..... Patent Blue AE extra..... Brilliant Patent Blue A (S. 1913).....	A B By By K M M M M M	40,848	10,220
545a	NEPTUNE BLUE (V. M.)..... Neptune Blue BR extra..... Neptune Blue BTF..... Neptune Blue R (S.; Kal. 1908).....	B B B	10,765	2,305
545b	NEW PATENT BLUE GA (S. 1899; R. 51; preparation).....	By	2,011	
545c	BRILLIANT ACID BLUE (V. M.)..... Brilliant Acid Blue B (S.; Kal. 1911)..... Brilliant Acid Blue B 28033..... Brilliant Acid Blue B conc. 28044..... Brilliant Acid Blue FF (S.; Kal. 1910)..... Brilliant Acid Blue L 25097..... Brilliant Acid Blue 25601.....	By By By By By By S	10,120	2,505
546	CYANOL.....1891 Sodium salt of m-oxy-diethyl-diamido-phenyl-ditolyl-carbinol-disulphonic acid. $\begin{matrix} \text{HO}[3] \\ \text{NaO}_2\text{S}[6] \\ \text{NaO}_2\text{S}[4] \end{matrix} \text{C}_6\text{H}_4[1]-\text{C} \begin{cases} (-[\text{I}]\text{C}_6\text{H}_5 \begin{cases} [3]\text{CH}_2 \\ [4]\text{NH} \cdot \text{C}_2\text{H}_5 \end{cases} \\ (-\text{OH} \begin{cases} [3]\text{CH}_2 \\ [4]\text{NH} \cdot \text{C}_2\text{H}_5 \end{cases} \\ (-[\text{I}]\text{C}_6\text{H}_5 \begin{cases} [3]\text{CH}_2 \\ [4]\text{NH} \cdot \text{C}_2\text{H}_5 \end{cases} \end{cases}$ Cyanol 3 D 440. (Current marks, AB, BB, C, FF, GG, II.)... Cyanol 10 Q & O..... Cyanol 3 Z..... Cyanol ZZZ 654.....	C C C C	40,615	15,707
547	KETONE BLUE 4 BN.....1890 Sulphonic acid of ethoxy-trimethyl-phenyl-triamido-triphenyl-carbinol.	M	0	
548	ACID VIOLET 6 BN.....1891 Sodium salt of o-ethoxy-tolyl-tetramethyl-triamido-triphenyl-carbinol-trisulphonic acid. $\text{CH}_3 \cdot \text{C}_6\text{H}_4 \cdot \text{O} \begin{cases} [2] \\ [4] \end{cases} \text{C}_6\text{H}_4[1]-\text{C} \begin{cases} (-[\text{I}]\text{C}_6\text{H}_5 \begin{cases} [3]\text{SO}_2\text{Na} \\ [4]\text{N}(\text{CH}_3)_2 \end{cases} \\ (-\text{OH} \begin{cases} [3]\text{SO}_2\text{Na} \\ [4]\text{N}(\text{CH}_3)_2 \end{cases} \\ (-[\text{I}]\text{C}_6\text{H}_5 \begin{cases} [3]\text{SO}_2\text{Na} \\ [4]\text{N}(\text{CH}_3)_2 \end{cases} \end{cases}$ Acid Violet 6 BN..... Acid Violet 6 BN..... Acid Violet 6 BS..... Acid Violet 6 BN 250 per cent..... Acid Violet 6 B conc.....	B WD WD I H	6,861	2,100

## VII. TRIPHENYLMETHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
549	CHROME VIOLET.....1891 Tetramethyl-diamido-oxy-triphenyl-carbinol-m-carboxylic acid. $\text{HO}-\text{C} \begin{cases} [1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_2 \\ [1]\text{C}_6\text{H}_4[3]\text{CO}_2\text{H} \\ [1]\text{C}_6\text{H}_4[4]\text{OH} \\ [1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_2 \end{cases}$	By	0	
549a	BRILLIANT CHROME VIOLET BD.....	By	51	
550	CHROME BORDEAUX.....1891 Tetramethyl-triamido-oxy-triphenyl-carbinol-m-carboxylic acid. <i>4. Oxy derivatives.</i>	By	0	
551	ERIOCHROME AZUROL BC.....1906 Product of the condensation of an ortho-haloren derivative of benzaldehyde with o-cresotinic acid, followed by oxidation.	G	21,080	
552	CHROMAL BLUE.....1906 Product of the condensation of an ortho-derivative of nitro-benzaldehyde with o-cresotinic acid, followed by oxidation.  Chromal Blue G conc..... Chromal Blue GC (for printing).....	----- G G	1,235	94,438
552a	CHROMAL DARK BLUE K.....	G	100	
553	ERIOCHROME CYANINE RC.....1906 $\begin{matrix} & & [3]\text{CH}_3 \\ & &   \\ -[1]\text{C}_6\text{H}_2 & & [4]\text{OH} \\ & &   \\ & & [5]\text{CO}_2\text{Na} \\ \text{C} & -[1]\text{C}_6\text{H}_4[2]\text{SO}_2\text{Na} \\ & &   \\ -\text{C}_6\text{H}_2 & & [5]\text{CO}_2\text{Na} \\ & &   \\ & & [4]=\text{O} \\ & &   \\ & & [3]\text{CH}_3 \end{matrix}$	G	2,249	
554	CHROME AZUROL S conc.....1906 Product of the condensation of an ortho-halogen derivative of sulpho-benzaldehyde with o-cresotinic acid, followed by oxidation.	G	2,469	
555	AURINE.....1834 Mixture of aurine (trioxy-triphenyl-carbinol), oxydized aurine, methyl-aurine, and pseudorosolic acid (coralline-phthalein). The pseudorosolic acid forms the chief constituent of commercial aurine.  <i>Aurine:</i> $\text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]\text{OH} \\ -[1]\text{C}_6\text{H}_4[4]\text{OH} \\ -[1]\text{C}_6\text{H}_4[4]=\text{O} \end{cases}$	B	784	
556	RED CORALLINE..... Product of the action of ammonia upon aurine. It is probably a combination of pararosaniline with p-rosolic acid.	-----	0	
557	CHROME VIOLET.....1889 Sodium salt of aurine-tricarboxylic acid. $\text{HO}-\text{C} \begin{cases} [1]\text{C}_6\text{H}_4[3]\text{CO}_2\text{Na} \\ [1]\text{C}_6\text{H}_4[4]\text{OH} \\ [1]\text{C}_6\text{H}_4[3]\text{CO}_2\text{Na} \\ [1]\text{C}_6\text{H}_4[4]\text{OH} \\ [1]\text{C}_6\text{H}_4[3]\text{CO}_2\text{Na} \\ [1]\text{C}_6\text{H}_4[4]\text{OH} \end{cases}$	G	220	
	B. DIPHENYL-NAPHTHYL-METHANE COLORS.			
558	VICTORIA BLUE R.....1892 Hydrochloride of ethyl-tetramethyl-triamido- $\alpha$ -naphthyl-diphenyl-carbinol. $\text{C} \begin{cases} -[1]\text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_2 \\ -[1]\text{C}_6\text{H}_4[4]\text{NH}(\text{C}_2\text{H}_5) \\ -[1]\text{C}_6\text{H}_4[4]=\text{N}(\text{CH}_3)_2\text{Cl} \end{cases}$ Victoria Blue R..... New Victoria Blue B.....	----- B By	4,171	33



## VII. DIPHENYL-NAPHTHYL-METHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
559	VICTORIA BLUE B.....1883 Hydrochloride of phenyl-tetramethyl-triamido-diphenyl- $\alpha$ -naphthyl-carbinol. $\begin{array}{c} \text{C} \begin{cases} \text{---} [1] \text{C}_6\text{H}_4 [4] \text{---} \text{N}(\text{CH}_3)_2 \text{Cl} \\ \text{---} [1] \text{C}_6\text{H}_4 [4] \text{N}(\text{CH}_3)_2 \\ \text{---} [1] \text{C}_{10}\text{H}_7 [4] \text{NH}(\text{C}_6\text{H}_5) \end{cases} \end{array}$	.....	109,627	\$33,117
	Victoria Blue B base.....	B		
	Victoria Blue B conc.....	B		
	Victoria Blue B conc. (free from dextrine).....	B		
	Victoria Blue BE.....	B		
	Victoria Blue BS.....	B		
	Victoria Blue BSS.....	B		
	Victoria Pure Blue B (S. 1904).....	B		
	Victoria Blue B base 14413.....	K		
	Victoria Blue B base.....	K		
	Victoria Blue B.....	M		
	Silk Blue B.....	BK		
	Silk Blue 5770.....	BK		
	Victoria Blue B conc.....	BK		
	Victoria Blue B.....	tM		
	Victoria Blue B extra.....	tM		
	Victoria Blue B conc.....	tM		
	Victoria Blue B conc. SAD.....	tM		
	Victoria Blue B.....	I		
	Victoria Blue B conc.....	I		
	Victoria Blue B conc. 6½ : 10.....	S		
559a	VICTORIA BLUE BASE.....	.....	4,745	2,404
	Victoria Blue Base.....	S		
	Victoria Blue Base 61272.....	H		
559b	VICTORIA BRILLIANT BLUE.....	.....	13,397	4,382
	Victoria Brilliant Blue B (S. 1904).....	M		
	Brilliant Victoria Blue RB 2007 (S. 1907).....	I		
560	NIGHT BLUE.....	.....	351	614
	Hydrochloride of p-tolyl-tetraethyl-triamido-diphenyl- $\alpha$ -naphthyl-carbinol. $\begin{array}{c} \text{C} \begin{cases} \text{---} [1] \text{C}_6\text{H}_4 [4] \text{---} \text{N}(\text{C}_2\text{H}_5)_2 \text{Cl} \\ \text{---} [1] \text{C}_6\text{H}_4 [4] \text{N}(\text{C}_2\text{H}_5)_2 \\ \text{---} [1] \text{C}_{10}\text{H}_7 [4] \text{NH}(\text{C}_7\text{H}_7) \end{cases} \end{array}$			
	Night Blue.....	B		
	Night Blue.....	I		
561	ACID VIOLET 5 BNS.....1895 Sulphonic acid of $\beta$ -naphthyl-penta-alkyl-rosaniline.	S	0	
561a	ACID VIOLET (V. M.).....	.....	1,896	677
	Acid Violet D conc.....	S		
	Acid Violet S.....	S		
	Acid Violet 26449.....	S		
562	FAST ACID BLUE.....1893 Product of the condensation of tetramethyl-diamido-benzhydrol with 1-naphthylamine-2-sulphonic acid, or its sulpho derivatives, with subsequent oxidation. Fast Acid Blue B..... Intensive Blue B.....	By By	7,725	3,471
562a	WOOL BLUE N.....	.....	8,043	2,399
	Wool Blue N extra.....	By		
	Brilliant Wool Blue B extra.....	By		
562b	WOOL BLUE (V. M.).....	.....	10,443	4,844
	Wool Blue R extra.....	By		
	Wool Blue SR extra.....	By		
	Wool Blue B.....	AW		
	Wool Blue B extra strong.....	AW		
	Wool Blue SB extra strong.....	AW		
	Wool Blue M.....	AW		
562c	BRILLIANT WOOL BLUE (V. M.).....	.....	6,579	2,318
	Brilliant Wool Blue FFR extra (S.; Kal. 1912).....	By		
	Brilliant Wool Blue G extra (S. 1904).....	By		
562d	FAST ACID BLUE 3 B.....	Q	441	179

## VII. DIPHENYL-NAPHTHYL-METHANE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
563	NEW PATENT BLUE B.....1897 Calcium, magnesium or sodium salt of the disulphonic acid of tetramethyl-diphenyl-naphthyl-carbinol. $\text{HO}-\text{C} \begin{cases} -[\text{C}_6\text{H}_4(4)\text{N}(\text{CH}_3)_2] \\ -[\text{C}_6\text{H}_4(4)\text{N}(\text{CH}_3)_2] \\ -[\text{C}_6\text{H}_4(2)\text{SO}_2\text{Na}] \\ -[\text{C}_6\text{H}_4(6)\text{SO}_2\text{Na}] \end{cases}$	By	596	
564	NAPHTHALENE GREEN.....1899 Product of the condensation of tetramethyl-diamido-benzhy-drol with naphthalene-disulphonic acid, and subsequent oxida-tion. Naphthalene Green conc..... Naphthalene Green V..... Erio Green N conc.....	M M G	22, 144	\$5, 904
565	ACID BLUE B.....1895 Product of the sulphonation of diphenyl-naphthyl-methanes. Wool Blue G extra..... Acid Blue B.....	A S	1, 358	524
565a	WOOL BLUE (V. M.)..... Wool Blue 2 B (S.; derivation).....1898 Wool Blue 2 B strong 50:100..... Wool Blue 5 B..... Wool Blue 2 B X..... Wool Blue R..... Wool Blue R X..... Wool Blue 1092..... Wool Blue 2030..... Wool Blue 2051..... Wool Blue 2062..... Wool Blue 2084..... Wool Blue 2095..... Wool Blue 3006..... Wool Blue 3050.....	A A A A A A A A Lev Lev Lev Lev Lev Lev Lev	173, 904	12, 406
565b	ACID BLUE (V. M.)..... Acid Blue 7 B..... Acid Blue EX..... Acid Blue R..... Acid Blue 22244..... Acid Blue 23579.....	S S S S S S	5, 121	2, 263
566	WOOL GREEN S.....1883 Sodium salt of tetramethyl-diamido-diphenyl- $\beta$ -oxy-naphthyl-carbinol-disulphonic acid. $\text{HO} \cdot \text{C} \begin{cases} [\text{C}_6\text{H}_4(4)\text{N}(\text{CH}_3)_2] \\ [\text{C}_6\text{H}_4(4)\text{N}(\text{CH}_3)_2] \\ [\text{C}_6\text{H}_4(2)\text{OH}] \\ [\text{C}_6\text{H}_4(6)\text{SO}_2\text{Na}] \end{cases}$ Wool Green S extra conc. X..... Wool Green S extra conc..... Wool Green BS..... Wool Green BS extra..... Wool Green BS conc. 27275..... Wool Green BS..... Wool Green S 250 per cent..... Wool Green B.....	B B By By By BK CV Q	23, 863	12, 536
566a	WOOL GREEN (V. M.)..... Wool Green 16437..... Wool Green extra conc..... Wool Green SAK extra conc 400 per cent.....	L tM I	7, 721	3, 049
566b	CYANOL GREEN (V. M.)..... Cyanol Green 4 R 671. (Current marks, B, 5 G, S.)..... Cyanol Green 41 U..... Cyanol Green 41 U 1599..... Cyanol Green 41 V 1600..... Cyanol Green 8 W 776.....	C C C C C C	10, 988	2, 193
566c	CYANOL FAST GREEN (V. M.)..... Cyanol Fast Green G (S. 1903)..... Cyanol Fast Green 69 A 2289.....	C C	7, 501	2, 435
567	CHROME BLUE.....1890 Tetramethyl-diamido-oxy-diphenyl-naphthyl-carbinol-car-boxylic acid.	By	0	

## VIII. XANTHONE COLORING MATTERS.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A. AMIDO COMPOUNDS (FLUORIN COLORS).				
1. Pyronines.				
568	PYRONINE G.....1839 Tetramethyl-diamido-xanthenyl chloride. $\begin{array}{c} \text{Cl} \\   \\ (\text{CH}_3)_2\text{N}-[4]\text{C}_6\text{H}_4-\left\{ \begin{array}{c} \text{O} \\ \diagup \quad \diagdown \\ \text{C} \quad \text{C} \\ \diagdown \quad \diagup \\ \text{C} \quad \text{C} \end{array} \right\} \text{C}_6\text{H}_4-[4]\text{N}(\text{CH}_3)_2 \\   \\ \text{H} \end{array}$	L	0	
569	ACRIDINE RED B.....1891 Oxidation of Pyronine G.	L	0	
2. Succineines.				
570	RHODAMINE S.....1888 Hydrochloride of dimethyl-m-amido-phenol-succineine. $\begin{array}{c} \text{Cl}(\text{CH}_3)_2\text{N}-[4]\text{C}_6\text{H}_4-\left\{ \begin{array}{c} \text{O} \\ \diagup \quad \diagdown \\ \text{C} \quad \text{C} \\ \diagdown \quad \diagup \\ \text{C} \quad \text{C} \end{array} \right\} \text{C}_6\text{H}_4-[4]\text{N}(\text{CH}_3)_2 \\   \\ \text{C}_2\text{H}_4 \cdot \text{CO}_2\text{H} \end{array}$ Rhodamine S..... Rhodamine S.....	B I	600	\$520
3. Rhodamines.				
571	RHODAMINE 6 G.....1892 Ethyl ester of symmetrical diethyl-rhodamine (obtained from ethyl-m-amido-phenol and phthalic anhydride). $\begin{array}{c} \text{Cl}(\text{C}_2\text{H}_5)_2\text{N}-[4]\text{C}_6\text{H}_4-\left\{ \begin{array}{c} \text{O} \\ \diagup \quad \diagdown \\ \text{C} \quad \text{C} \\ \diagdown \quad \diagup \\ \text{C} \quad \text{C} \end{array} \right\} \text{C}_6\text{H}_4-[4]\text{NH}(\text{C}_2\text{H}_5)_2 \\   \\ \text{C}_6\text{H}_4[2]\text{CO}_2\text{C}_2\text{H}_5 \end{array}$ Rhodamine 6 G pure..... Rhodamine 6 G extra pure..... Rhodamine 6 G extra..... Rhodamine 6 G extra.....	B B B I	37,460	13,496
571a	BRILLIANT PINK.....	S	55	
572	RHODAMINE G.....1891 Chiefly triethyl-rhodamine (removal of one ethyl group from Rhodamine B). $\begin{array}{c} \text{Cl}(\text{C}_2\text{H}_5)_2\text{N}-[4]\text{C}_6\text{H}_4-\left\{ \begin{array}{c} \text{O} \\ \diagup \quad \diagdown \\ \text{C} \quad \text{C} \\ \diagdown \quad \diagup \\ \text{C} \quad \text{C} \end{array} \right\} \text{C}_6\text{H}_4-[4]\text{NHC}_2\text{H}_5 \\   \\ \text{C}_6\text{H}_4[2]\text{CO}_2\text{H} \end{array}$	B	500	
572a	RHODAMINE (V. M.)..... Rhodamine AL..... Rhodamine R..... Rhodamine 5 G..... Rhodamine 6302.....	B I S Q	2,143	1,533
573	RHODAMINE B.....1887 Hydrochloride of diethyl-m-amido-phenol-phthalein. $\begin{array}{c} \text{Cl}(\text{C}_2\text{H}_5)_2\text{N}-[4]\text{C}_6\text{H}_4-\left\{ \begin{array}{c} \text{O} \\ \diagup \quad \diagdown \\ \text{C} \quad \text{C} \\ \diagdown \quad \diagup \\ \text{C} \quad \text{C} \end{array} \right\} \text{C}_6\text{H}_4-[4]\text{N}(\text{C}_2\text{H}_5)_2 \\   \\ \text{C}_6\text{H}_4 \cdot \text{CO}_2\text{H} \end{array}$ Rhodamine B extra..... Rhodamine B..... Rhodamine B extra base..... Rhodamine B..... Rhodamine B extra..... Rhodamine B extra..... Rhodamine B extra..... Rhodamine B extra..... Rhodamine B extra 100 per cent.....	B B B By By K AW I I	58,339	23,777

## VIII. XANTHONE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
573	RHODAMINE B—Continued. Rhodamine B extra..... Rhodamine B conc..... Rhodamine B 2..... Rhodamine BN.....	S S S S Q		
573a	CARTHAMINE..... Carthamine 6 A extra..... Carthamine B extra (S.).....	tM tM	1,015	\$345
574	RHODAMINE 3 B.....1891 Ethyl ester of Rhodamine B.	I	0	
575	RHODINE 12 GM.....1900 Ethyl ester of dimethyl-amido-methoxy-rhodamine.	I	0	
576	RHODAMINE 3 G.....1895 Ethyl ester of unsymmetrical dimethyl-homo-rhodamine.  $\text{Cl}(\text{CH}_3)_2\text{N}=\text{[4]C}_6\text{H}_5\left\{\begin{array}{c} \text{[2]O[2]} \\ \text{[1]C[1]} \end{array}\right\}\text{C}_6\text{H}_5\left\{\begin{array}{c} \text{[5]CH}_3 \\ \text{[4]NH}_2 \end{array}\right\}$ $\text{C}_6\text{H}_4\text{[2]CO}_2\text{C}_2\text{H}_5$ Rhodamine 3 G..... Rhodamine 3 G extra..... Irisamine.....	B B C	16,940	6,855
576a	RHODAMINE 5 G (S.; Kal. 1905; R. 45).....	By	1,671	
576b	RHODAMINE SCARLET G (S.; Kal. 1905; R. 45).....1904	By	957	
577	RHODINE 2 G.....1895 Ethyl ester of dimethyl-ethyl-rhodamine.	I	0	
578	RHODAMINE 12 GF.....1898 Action of dimethyl-amido-oxy-benzoylbenzoic acid upon resorcin, followed by etherification of the product, and treatment with formaldehyde.	I	0	
579	XYLENE RED.....1903 Product of the condensation of benzaldehyde-disulphonic acid with (2 mols.) diethyl-m-amido-phenol, followed by oxidation.  $(\text{C}_6\text{H}_5)_2\text{N}=\text{[4]C}_6\text{H}_5\left\{\begin{array}{c} \text{[2]O[2]} \\ \text{[1]C[1]} \end{array}\right\}\text{C}_6\text{H}_5=\text{[4]N}(\text{C}_2\text{H}_5)_2$ $\text{HO}_3\text{S[4]}\cdot\text{C}_6\text{H}_5\cdot\text{[2]SO}_3\text{—}$ Xylene Red B..... Xylene Red B conc..... Xylene Red B extra.....	S S S	1,698	1,396
580	FAST ACID VIOLET B.....1898 Sodium salt of diphenyl-m-amido-phenolphthalein-sulphonic acid.  $\text{C}_6\text{H}_5\text{[4]}=\text{N}\cdot\text{C}_6\text{H}_5$ $\text{[2]O[1]C}\cdot\text{C}_6\text{H}_4\text{[2]CO}_2\text{Na}$ $\text{C}_6\text{H}_5\text{[4]NH}\cdot\text{C}_6\text{H}_4\cdot\text{SO}_3\text{Na}$	M	877	
580a	FAST ACID VIOLET (V. M.)..... Fast Acid Violet 44 O 1608..... Fast Acid Violet R (S.; Kal. 1905)..... Fast Acid Violet RBE (S.; Kal. 1905)..... Fast Acid Violet RGE (S.; Kal. 1905)..... Fast Acid Violet..... Fast Acid Violet RX.....	C M M M M AW H	19,811	12,976
581	FAST ACID PHLOXINE A.....1898 Various rhodamine-sulphonic acids obtained by the action of oleum upon rhodamine.	M	100	
581a	FAST ACID MAGENTA G (S.; a sulphonic acid of rhodamine).	M	500	
581b	FAST ACID RED A (S.; phenyl-rhodamine-sulphonic acid).1891	M	50	

## VIII. XANTHONE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
582	FAST ACID VIOLET A 2 R.....1888 Sodium salt of di-o-tolyl-m-amido-phenolphthalein-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]=\text{N} \cdot \text{C}_6\text{H}_4(\text{CH}_3) \\ \boxed{[2]\text{O}[1]\text{C}} \cdot \text{C}_6\text{H}_4[2]\text{CO}_2\text{Na} \\ \text{C}_6\text{H}_4[4]\text{NH} \cdot \text{C}_6\text{H}_3\left\{\begin{array}{l} \text{CH}_3 \\ \text{SO}_2\text{Na} \end{array}\right\} \end{array}$	M	875	
583	ACID ROSAMINE A.....1893 Sodium salt of di-mesidyl-m-amido-phenolphthalein-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]=\text{N} \cdot \text{C}_6\text{H}_3(\text{CH}_3)_2 \\ \boxed{[2]\text{O}[1]\text{C}} \cdot \text{C}_6\text{H}_4 \cdot \text{CO}_2\text{Na} \\ \text{C}_6\text{H}_4[4]\text{NH} \cdot \text{C}_6\text{H}(\text{CH}_3)_2\text{SO}_2\text{Na} \end{array}$	M	50	
584	FAST ACID BLUE R.....1889 Sodium salt of di-p-ethoxy-phenyl-m-amido-phenol-dichlorophthalein-sulphonic acid. $\begin{array}{c} \text{C}_6\text{H}_4[4]=\text{N} \cdot \text{C}_6\text{H}_4(\text{OC}_2\text{H}_5)_2 \\ \boxed{[2]\text{O}[1]\text{C}} - \text{C}_6\text{H}_3\left\{\begin{array}{l} [3]\text{Cl} \\ [2]\text{CO}_2\text{Na} \\ [6]\text{Cl} \end{array}\right\} \\ \text{C}_6\text{H}_4[4]\text{NH} \cdot \text{C}_6\text{H}_3(\text{OC}_2\text{H}_5)_2\text{SO}_2\text{Na} \end{array}$	M	1,502	
584a	FAST ACID BLUE RH (S.; Kal. 1911)..... B. OXY COMPOUNDS (FLUORON COLORS). 1. <i>Oxy-phthaleins.</i>	II	2,520	
585	URANINE.....1871 Sodium or potassium salt of fluorescein. $\text{O} = [4]\text{C}_6\text{H}_3\left\{-\begin{array}{l} [2]\text{O}[2] \\ [1]\text{C}[1] \end{array}-\right\} \text{C}_6\text{H}_3[4]\text{ONa} \\ \text{C}_6\text{H}_4 \cdot \text{CO}_2\text{Na}$ Uranine..... Uranine A powder..... Uranine (potassium salt)..... Uranine N lumps.....	A B M M	2,273	\$1,179
586	CHRYSOLENE conc.....1877 Sodium salt of benzyl-fluorescein. $\text{NaO}[4]\text{C}_6\text{H}_3\left\{-\begin{array}{l} [2]\text{O}[2] \\ [1]\text{C}[1] \end{array}-\right\} \text{C}_6\text{H}_3\left\{\begin{array}{l} [3]\text{CH}_2 \cdot \text{C}_6\text{H}_5 \\ [4]=\text{O} \end{array}\right\} \\ \text{C}_6\text{H}_4[2]\text{CO}_2\text{Na}$	G		
587	EOSINE.....1874 Alkali salts of tetrabromo-fluorescein. $\begin{array}{c} \text{Br}[3] \\ \text{NaO}[4] \\ \text{Br}[5] \end{array} \left\{ \text{C}_6\text{H}_3\left\{-\begin{array}{l} [2]\text{O}[2] \\ [1]\text{C}[1] \end{array}-\right\} \text{C}_6\text{H}_3\left\{\begin{array}{l} [3]\text{Br} \\ [4]=\text{O} \\ [5]\text{Br} \end{array}\right\} \right. \\ \left. \text{C}_6\text{H}_4[2]\text{CO}_2\text{Na} \right.$ Eosine extra..... Eosine extra AG..... Eosine extra A 3 G..... Eosine extra BB..... Eosine 19246..... Eosine 19247..... Eosine 19805..... Eosine 208.7..... Eosine 20970..... Eosine extra (yellowish) 701.....	K M M M CJ CJ CJ CJ CJ G	35,511	13,123

## VIII. XANTHONE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
587a	<b>EOSINE (V. M.).</b> Eosine A..... Eosine A G..... Eosine CA..... Eosine W extra..... Eosine A conc. 27020..... Eosine 1104. (Current marks, 10 B, GGF, GGG, J.)..... Eosine 62 W 2132..... Eosine 62 X 2133..... Eosine 61 Z 2135..... Eosine 62 Z 2135.....	B B B B B B B B B B	21,617	\$7,891
587b	<b>BROMOFLUORESCIC ACID.</b> Bromofluoresceic Acid Crystals (S.; eosine color for lakes)..... Bromofluoresceic Acid A 3 G..... Bromofluoresceic Acid BA conc..... Bromofluoresceic Acid BL (blue shade).....	M M M M	38,000	18,397
588	<b>METHYL EOSINE.</b> .....1874 Potassium salt of tetrabromo-fluorescein-methyl ester.	B	0	
589	<b>EOSINE SP.</b> .....1874 Potassium salt of tetrabromo-fluorescein-ethyl ester.	B	2,315	
	$\text{O}=\text{[4]C}_6\text{HBr}_2\left\{\begin{array}{c} \text{[1]O[1]} \\ \text{[1]C[1]} \end{array}\right\}\text{C}_6\text{HBr}_2\text{[4]OK}$ $\text{C}_6\text{H}_4\text{[2]CO}_2\text{C}_2\text{H}_5$			
590	<b>EOSINE BNL.</b> .....1875 Potassium or sodium salt of dibromo-dinitro-fluorescein.	B	201	
	$\text{O}=\text{[4]C}_6\text{H}\left\{\begin{array}{c} \text{Br[3]} \\ \text{NO}_2\text{[5]} \end{array}\right\}\left\{\begin{array}{c} \text{[2]O[2]} \\ \text{[1]C[1]} \end{array}\right\}\text{C}_6\text{H}\left\{\begin{array}{c} \text{[3]O} \\ \text{[4]OK} \\ \text{[5]NO}_2 \end{array}\right\}$ $\text{C}_6\text{H}_4\text{[2]CO}_2\text{K}$			
590a	<b>ACID EOSINE (V. M.).</b> Acid Eosine CA..... Acid Eosine G..... Acid Eosine L new..... Acid Eosine L 27214..... Acid Eosine L 3 18949..... Acid Eosine EP..... Acid Eosine 1632..... Acid Eosine 3 G..... Acid Eosine 13389..... X L Acid Eosine 5 B.....	B B B B B B B K CJ CJ H	17,439	7,388
590b	<b>FAST EOSINE L paste.</b> .....1875	B	2,443	
591	<b>ERYTHROSINE G.</b> .....1875 Sodium or potassium salt of diiodo-fluorescein.	B	99	
	$\text{O}=\text{[4]C}_6\text{H}_2\left\{\begin{array}{c} \text{I[3]} \\ \text{[1]C[1]} \end{array}\right\}\text{C}_6\text{H}_2\left\{\begin{array}{c} \text{[3]I} \\ \text{[4]ONa} \end{array}\right\}$ $\text{C}_6\text{H}_4\text{[2]CO}_2\text{Na}$			
592	<b>ERYTHROSINE B.</b> .....1876 Sodium or potassium salt of tetraiodo-fluorescein.		4,350	9,169
	$\text{O}=\text{[4]C}_6\text{H}\left\{\begin{array}{c} \text{I[3]} \\ \text{I[5]} \end{array}\right\}\left\{\begin{array}{c} \text{[2]O[2]} \\ \text{[1]C[1]} \end{array}\right\}\text{C}_6\text{H}\left\{\begin{array}{c} \text{[3]I} \\ \text{[4]ONa} \\ \text{[5]I} \end{array}\right\}$ $\text{C}_6\text{H}_4\text{[2]CO}_2\text{Na}$			
	Erythrosine extra..... Erythrosine A extra pure..... Erythrosine B extra pure.....	M M M		
593	<b>PHLOXINE P.</b> .....1875 Alkaline salts of tetrabromo-dichloro-fluorescein.		2,844	4,125
	$\text{O}=\text{[4]C}_6\text{HBr}_2\left\{\begin{array}{c} \text{[2]O[2]} \\ \text{[1]C[1]} \end{array}\right\}\text{C}_6\text{HBr}_2\text{[4]OK}$ $\text{C}_6\text{H}_2\left\{\begin{array}{c} \text{[6]Cl} \\ \text{[2]CO}_2\text{K} \\ \text{[3]Cl} \end{array}\right\}$			
	Phloxine P..... Phloxine.....	B DH		

## VIII. XANTHONE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
594	CYANOSINE SPIRIT SOLUBLE.....1876 Alkaline salt of tetrabromo-dichloro-fluorescein-methyl ester.	M	0	
595	ROSE BENGALE..... Alkaline salt of tetralodo-dichloro-fluorescein. $\text{O}-\begin{array}{c} \text{I[3]} \\ \text{[4]} \\ \text{I[5]} \end{array} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} -\text{[2]O[2]-} \\ \text{[1]C[1]-} \end{array} \right\} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[3]I} \\ \text{[4]O} \\ \text{[5]I} \end{array} \right\} \text{K}$ $\text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[6]Cl} \\ \text{[2]CO}_2\text{K} \\ \text{[3]Cl} \end{array} \right\}$ Rose Bengale NTO..... Rose Bengale N..... Rose Bengale double..... Rose Bengale double.....	B C D H S	2,277	\$4,151
596	PHLOXINE.....1882 Sodium salt of tetrabromo-tetrachloro-fluorescein. $\text{O}-\text{[4]C}_6\text{HBr}_2 \left\{ \begin{array}{c} -\text{[2]O[2]-} \\ \text{[1]C[1]-} \end{array} \right\} \text{C}_6\text{HBr}_2 \text{[4]ONa}$ $\text{C}_6\text{Cl}_4 \text{[2]CO}_2\text{Na}$ Phloxine B..... Phloxine GA extra..... Phloxine HM.....	M M M	1,020	1,039
597	ROSE BENGALE B.....1882 Potassium salt of tetralodo-tetrachloro-fluorescein. $\text{O}-\begin{array}{c} \text{I[3]} \\ \text{[4]} \\ \text{I[5]} \end{array} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} -\text{[2]O[2]-} \\ \text{[1]C[1]-} \end{array} \right\} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[3]I} \\ \text{[4]O} \\ \text{[5]I} \end{array} \right\} \text{K}$ $\text{C}_6\text{Cl}_4 \text{[2]CO}_2\text{K}$ Rose Bengale B..... Rose Bengale B conc..... Rose Bengale..... Rose Bengale B..... Rose Bengale double.....	B K M M G	1,354	2,409
598	CYANOSINE B.....1882 Sodium salt of tetrabromo-tetrachloro-fluorescein-ethyl ester.	I	0	
599	GALLEINE.....1871 Pyrogallol-phthalein. $\text{HO[3]} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[2]O[2]} \\ \text{[1]C[1]} \end{array} \right\} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[3]OH} \\ \text{[4]OH} \end{array} \right\}$ $\text{O}-\text{[4]} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[2]O[2]} \\ \text{[1]C[1]} \end{array} \right\} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[3]OH} \\ \text{[4]OH} \end{array} \right\}$ $\text{C}_6\text{H}_4 \text{[2]CO}_2\text{H}$ Galleine SR extra powder..... Galleine SW extra..... Galleine W conc..... Galleine powder..... Alizarin Violet 68 T 2282..... Alizarin Violet 68 U 2283..... Alizarin Violet D-I (R. 58)..... Alizarin Violet N..... Anthracene Violet 18610..... Alizarin Violet BL powder.....	B B B By C C M M I Q	15,404	\$,817
2. Anthra-Oxy-Phthaleins.				
600	CERULEIN B.....1876 Action of sulphuric acid upon fluorescein.	M	0	
601	CERULEIN S.....1871 Bisulphite compound of $\text{HO[3]} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[2]O[2]} \\ \text{[1]C[1]} \end{array} \right\} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[3]OH} \\ \text{[4]O} \end{array} \right\}$ $\text{HO[4]} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[2]O[2]} \\ \text{[1]C[1]} \end{array} \right\} \text{C}_6\text{H}_3 \left\{ \begin{array}{c} \text{[3]OH} \\ \text{[4]O} \end{array} \right\}$ $\text{C}_6\text{H}_4 - \text{C} = \text{O}$ Cerulein I paste..... Cerulein S powder..... Cerulein S paste.....	B B B	2,404	921

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
602	ACRIDINE YELLOW conc. 1889 Hydrochloride of diamido-dimethyl-acridine. $\begin{array}{c} \text{H}_2\text{N}[4] \\ \text{H}_3\text{C}[5] \end{array} \text{C}_6\text{H}_3 \begin{array}{c} \text{[1]CH[1]} \\   \\ \text{[2]N[2]} \end{array} \text{C}_6\text{H}_3 \begin{array}{c} \text{[4]NH}_2 \\   \\ \text{[5]CH}_3 \end{array} \cdot \text{HCl}$	L	220	
602a	ACRIDINE GOLDEN YELLOW Acridine Golden Yellow 54666 A (S.; Kal. 1905) Acridine Golden Yellow	L G	1,693	\$1,173
603	ACRIDINE ORANGE 1889 Zinc double chloride of tetramethyl-diamido-acridine. <i>Hydrochloride:</i> $(\text{CH}_3)_2\text{N}[4]\text{C}_6\text{H}_3 \begin{array}{c} \text{[1]CH[1]} \\   \\ \text{[2]N[2]} \end{array} \text{C}_6\text{H}_3 \begin{array}{c} \text{[4]N(CH}_3)_2 \\   \\ \text{[5]CH}_3 \end{array} \cdot \text{HCl}$ Euchrysine 3 R.X. Acridine Orange NO.	B L	741	759
603a	RHODULINE ORANGE Rhoduline Orange N (S.; Kal. 1907) Rhoduline Orange NO (S.)	By By	1,595	539
604	ACRIDINE ORANGE R 1889 Salt of tetramethyl-diamido-phenyl-acridine.	L	0	
605	BENZOFULVINE O 1887 Hydrochloride of diamido-phenyl-dimethyl-acridine. $\begin{array}{c} \text{C}_6\text{H}_5 \\   \\ \text{H}_2\text{N}[4] \\ \text{H}_3\text{C}[5] \end{array} \text{C}_6\text{H}_3 \begin{array}{c} \text{[1]CH[1]} \\   \\ \text{[2]N[2]} \end{array} \text{C}_6\text{H}_3 \begin{array}{c} \text{[4]N(CH}_3)_2 \\   \\ \text{[5]CH}_3 \end{array} \cdot \text{HCl}$	GrE	600	
606	PHOSPHINE 1862 Nitrate of chrysanthine (unsymmetric diamido-phenyl-acridine) and homologues. $\begin{array}{c} \text{[1]C}_6\text{H}_4\text{[4]NH}_2 \\   \\ \text{C}_6\text{H}_3 \begin{array}{c} \text{[1]CH[1]} \\   \\ \text{[2]N[2]} \end{array} \text{C}_6\text{H}_3 \begin{array}{c} \text{[4]NH}_2 \\   \\ \text{[5]CH}_3 \end{array} \cdot \text{HNO}_3 \end{array}$ Phosphine 3 R. Philadelphia Yellow 2 G. Cannelle A.L. (S. H. IV, 694) Phosphine 54 D 1908. (Current mar., IIA.) Phosphine 55 M 1941. Phosphine G.O. Leather Yellow G. Leather Yellow O. Phosphine L.M. Phosphine O. Leather Yellow L.L. Leather Yellow G. Leather Yellow 2 G. Leather Yellow 3 G. Leather Yellow A. Leather Yellow G. Leather Yellow G.C. Leather Yellow G.S. Leather Yellow M. Phosphine A. Phosphine L.B. Phosphine P.H.B. Leather Yellow 5828a. Leather Yellow T.B.R. Leather Yellow P. Phosphine G.G. extra conc. (Kal. 1914). Phosphine A.R. extra conc. (Kal. 1914). Vitoline Yellow 5 G conc. Vitoline Yellow 5 G extra. Vitoline Yellow R. Leather Yellow G.N. Phosphine 12901.	A A B C C K M M M M BK CG CG CG CG GrE GrE GrE GrE GrE GrE GrE L tM tM tM tM tM tM tM AW P	101,853	30,422



## IX. ACRIDINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
606	PHOSPHINE—Continued.			
	Xanthine I.....	P		
	Xanthine CJB.....	H		
	Special Phosphine G.....	H		
	Phosphine RS.....	H		
	Leather Yellow FG.....	C		
	Leather Yellow FU.....	C		
	Leather Yellow R extra.....	C		
	Leather Yellow TG.....	C		
606a	AUOPHOSPHINE.....		2,799	\$1,330
	Auophosphine G (S.).....	A		
	Auophosphine 4 G (S.).....	A		
606b	BRILLIANT PHOSPHINE.....		1,333	557
	Brilliant Phosphine.....	I		
	Brilliant Phosphine 5 G.....	I		
606c	PATENT PHOSPHINE.....		28,627	17,881
	Patent Phosphine G 300 per cent.....	I		
	Patent Phosphine M 300 per cent.....	I		
	Patent Phosphine R.....	I		
	Patent Phosphine 19632.....	I		
606d	ACID PHOSPHINE R.....	CR	4,584	
606e	CORIPHOSPHINE.....		2,194	706
	Coriphosphine OS (S. 1900; R. 46).....	By		
	Coriphosphine OX extra.....	By		
606f	NANKIN powder (Kal. 1914).....	tM	1,677	
606g	LEATHER FLAVINE.....		24,153	8,235
	Leather Flavine 9118.....	I		
	Leather Flavine 9118.....	S		
607	RHEONINE.....1894		19,704	5,261
	Hydrochloride of tetramethyl-triamido-phenyl-acridine.			
	$\begin{array}{c} \text{C}_6\text{H}_4[4]\text{N}(\text{CH}_3)_3 \\   \\ (\text{CH}_3)_2\text{N}[4]\text{C}_6\text{H}_3 \begin{Bmatrix} [1]\text{C}[1] \\ [2]\text{N}[2] \end{Bmatrix} \text{C}_6\text{H}_4[4]\text{NH}_2\text{HCl} \end{array}$			
	Rheonine AL.....	B		
	Rheonine GD.....	B		
608	EUCHRYSINE.....1908		15,403	5,343
	(Composition unknown.)			
	Euchrysine RR.....	B		
	Euchrysine GG.....	B		
	Euchrysine GNX.....	B		
	Euchrysine GRNT.....	B		
	Euchrysine NX.....	B		
	Euchrysine RRD.....	B		
	Euchrysine RT.....	B		
609	HOMOPHOSPHINE OO.....1898	L	772	
	(Composition unknown.)			
609a	AURACINE G (S. 1902).....	By	51	
	(Composition unknown.)			
609b	DIAMOND PHOSPHINE.....		20,336	5,897
	(Composition unknown.)			
	Diamond Phosphine 28 A 1255 (S.; Kal. 1907). (Current marks, D, GG, PG, R.).....	C		
	Diamond Phosphine 40 H 1562.....	C		
	Diamond Phosphine 27 S 1247.....	C		
	Diamond Phosphine 27 T 1248.....	C		
609c	AUROFLAVINE KR (S.; Kal. 1908).....	M	625	
	(Composition unknown.)			
609d	FLAVOPHOSPHINE.....		6,000	1,566
	(Composition unknown.)			
	Flavophosphine G conc. (S.; Kal. 1905).....	M		
	Flavophosphine 4 G conc.....	M		
	Flavophosphine R conc. new.....	M		
	Flavophosphine R conc.....	M		

## IX. ACRIDINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
609e	CORIOFLAVINE..... (Composition unknown.) Corioflavine G (Kal. 1908)..... Corioflavine GG (Kal. 1908)..... Corioflavine G O O O (Kal. 1908)..... Corioflavine R (Kal. 1908).....	GrE GrE GrE GrE	40,343	\$13,433

## X. QUINOLINE COLORING MATTERS.

610	QUINOLINE RED.....1883 $\begin{array}{c} \text{C}_6\text{H}_5 \\   \\ \text{C} \begin{array}{l} \text{CH}_2 \cdot \text{C}_6\text{H}_4\text{N} \\ \text{C}_6\text{H}_4\text{N} \cdot \text{Cl} \end{array} \end{array}$	A	0	
611	QUINOLINE BLUE.....1856 Action of caustic alkalis on the product of the reaction between amyliodide and a mixture of equivalent quantities of quinoline and lepidine (= $\gamma$ -methyl-quinoline). $\text{C}_{22}\text{H}_{15}\text{H}_2\text{I}$	G	0	
612	QUINOLINE YELLOW, spirit soluble.....1882 Quinophthalone. $\text{C}_6\text{H}_4 \begin{Bmatrix} 1 \text{ CO} \\ 2 \text{ CO} \end{Bmatrix} \text{CH} - [2] \text{C}_6\text{H}_4\text{N}$ Quinoline Yellow spirit soluble..... Quinoline Yellow..... Quinoline Yellow extra..... Quinoline Yellow P..... Quinoline Yellow 9272, 174 per cent..... Quinoline Yellow..... Quinoline Yellow conc. 5:10..... Quinoline Yellow conc. double.....	   A B B B I S S S	79,553	\$28,170
613	QUINOLINE YELLOW, water soluble.....1882 Sodium salt of the sulphonic acids (chiefly di-sulphonic acid) of quinophthalone. $\begin{array}{c} \text{C} \begin{array}{l} \text{CH} \cdot \text{C}_6\text{H}_4\text{N}(\text{SO}_2\text{Na})_2 \\ \text{C}_6\text{H}_4 \cdot \text{CO} \cdot \text{O} \end{array} \end{array}$ Quinoline Yellow water soluble..... Quinoline Yellow water soluble, extra strong 50:100..... Quinoline Yellow extra..... Quinoline Yellow KT extra conc. (S.; Kal. 1911)..... Quinoline Yellow N extra..... Quinoline Yellow..... Quinoline Yellow extra..... Quinoline Yellow O..... Quinoline Yellow..... Quinoline Yellow.....	   A A By By By C M M AW I	15,324	7,672
613a	PINACHROME (S.). (A quinoline dye used for photographic purposes.).....	M	30	

## XI. THIOBENZENYL COLORING MATTERS.

614	CHROMINE G.....1883 Fusion of equal molecules of sulphur and dehydro-thio-toluidine; methylation and sulphonation of the product. $\text{C}_{20}\text{H}_{12}\text{N}_2\text{S}_2$	K	0	
614a	CHROMINE RR powder.....	S	1,001	
615	THIOFLAVINE S.....1888 Sulphonation of methylated primuline bases. Thioflavine S..... Thioflavine 610..... Thioflavine 654.....	  S K K	4,948	\$3,323

## XI. THIOBENZENYL COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
616	<b>PRIMULINE</b> .....1887 Sodium salt of the mono-sulphonic acids of the dehydro-thionated condensation products of dehydro-thio-toluidine, (mixed with some sodium dehydro-thio-p-toluidine-sulphonate).  <i>Chief constituent:</i> $\text{C} \begin{pmatrix} \text{—S—} \\ \text{—N—} \end{pmatrix} \text{C}_6\text{H}_5 \cdot \text{C} \begin{pmatrix} \text{—S—} \\ \text{—N—} \end{pmatrix} \text{C}_6\text{H}_5 \cdot \text{CH}_3$ $\text{C}_6\text{H}_5 \begin{pmatrix} \text{—S—} \\ \text{—N—} \end{pmatrix} \text{C} \cdot \text{C}_6\text{H}_5 \begin{pmatrix} \text{—SO}_2\text{Na} \\ \text{—N—} \end{pmatrix}$ Primuline..... Primuline A..... Primuline..... Primuline 4502..... Primuline A..... Primuline..... Polychromine AC..... Few Polychromine FB..... Primuline 19301..... Primuline 1329.....	A B C K M GrE G G I ClCo	56,212	\$3,473
616a	<b>PRIMULINE YELLOW</b> ..... Primuline Yellow superfine..... Primuline Yellow.....	By AW	11,764	1,346
617	<b>COLUMBIA YELLOW</b> .....1890 Oxidation products of dehydro-thio-toluidine-sulphonic acid, or of the latter and Primuline together. Columbia Yellow..... Columbia Yellow 50:100..... Chloramine Yellow FF..... Chloramine Yellow GG..... Chloramine Yellow HW..... Chloramine Yellow M..... Chloramine Yellow M 270:4..... Chloramine Yellow RC..... Chloramine Yellow extra..... Chloramine Yellow DB 27993..... Chloramine Fast Yellow B..... Triazol Fast Yellow 2 GOOOO..... Chloramine Yellow G conc. 5:10..... Chloramine Yellow M..... Oxypheanine A..... Oxypheanine C..... Oxypheanine GG..... Oxypheanine E.....	A A By By By By By By By By By By GrE S S ClCo ClCo ClCo ClCo	86,090	10,185
617a	<b>DIAMINE FAST YELLOW</b> ..... Diamine Fast Yellow 30 F 1310 (S.; Eal. 1905, 1908; S. H. IV, 1080, 1082, 1526, 1527). (Current marks, A, AR, AGG, B, C, FF, 3 G, M.)..... Diamine Fast Yellow GG 415..... Diamine Fast Yellow NN 421..... Diamine Fast Yellow 21 R 1096..... Diamine Fast Yellow 24 T 1173..... Diamine Fast Yellow 10 Z 829.....	C C C C C C	88,688	12,973
617b	<b>DIRECT YELLOW TO</b> .....	I	4,530	
617c	<b>DIRECT FAST YELLOW</b> ..... Direct Fast Yellow OO..... Direct Fast Yellow R..... Direct Fast Yellow A 308 LQD.....	GrE GrE tM	1,199	310
618	<b>THIOFLAVINE T</b> .....1888 Hydrochloride of dimethyl-dehydro-thio-toluidine-methylchloride. $\text{CH}_3[4]\text{C}_6\text{H}_3 \begin{pmatrix} \text{—N—} \\ \text{[1]} \\ \text{—S—} \\ \text{[2]} \end{pmatrix} \text{C}[4]\text{C}_6\text{H}_4[1]\text{N}(\text{CH}_3)_2$ Thioflavine 31 C 1332. (Current marks, S, T, TCN.)..... Thioflavine P 184..... Thioflavine R 185..... Methylene Yellow H.....	C C C M	31,714	17,683
618a	<b>RHODULINE YELLOW 6 G (S.)</b> .....1904	By	3,510	

## XII. INDOPHENOLS.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
619	INDOPHENOL.....1881 Oxidation product of p-amido-dimethyl-aniline and α-naphthol. $\text{N} \left\{ \begin{array}{c} \text{—} [1] \text{C}_6\text{H}_4 [4] \text{N} (\text{CH}_3)_2 \\ \text{—} [1] \text{C}_{10}\text{H}_6 [4] \text{—} \text{O} \end{array} \right.$	DH	0	

## XIII. OXAZINE AND THIAZINE COLORING MATTERS.

A. OXAZINE COLORS.				
620	CAPRI BLUE GON.....1890 Zinc double chloride of dimethyl-diethyl-diamido-toluphen-oxazonium chloride. $(\text{CH}_3)_2\text{N} \left\{ \begin{array}{c} [1] \\ \text{—} \text{N} \text{—} \\ [2] \\ \text{—} \text{O} \text{—} \end{array} \right\} \text{C}_6\text{H}_4 \left\{ \begin{array}{c} [5] \text{CH}_3 \\ [4] \text{N} (\text{C}_2\text{H}_5)_2 \end{array} \right.$ Cl	By	29	
620a	CAPRI GREEN BN (S.).....	L	99	
621	CRESYL BLUE BBS.....1892 Dimethyl-diamido-toluphenoxazonium chloride and homologues.	L	0	
622	DELPHINE BLUE B.....1889 Ammonium salt of the sulphonic acid of dimethyl-phenyl-diamido-oxy-phenoxazone.	S	0	
623	PYROGALLOL-CYANINE-SULPHONIC ACIDS.....1908 Action of pyrogallol-sulphonic acid upon nitroso-mono- and di-aryl-amines or upon nitroso-diazyl-amines.	DH	0	
624	VIOLET MODERNE N.....1907 Action of heat on Gallocyanines and Leuco-Gallocyanines.	DH	0	
625	CHROME HELIOTROPE.....1907 Action of nitroso-mono-aryl-aryl-amines upon gallic acid and its derivatives, with subsequent reduction.	DH	0	
626	GALLOCYANINE.....1881 Dimethyl-amido-dioxy-phenazoxonium carboxylate. $(\text{CH}_3)_2\text{N} \left\{ \begin{array}{c} [1] \\ \text{—} \text{N} \text{—} \\ [2] \\ \text{—} \text{O} \text{—} \end{array} \right\} \text{C}_6\text{H}_4 \left\{ \begin{array}{c} [6] \text{CO}_2\text{H} \\ [4] \text{—} \text{O} \\ [3] \text{OH} \end{array} \right.$ Gallocyanine D double paste..... Gallocyanine F paste..... Gallocyanine F powder..... Gallocyanine..... Gallocyanine DH paste..... Gallocyanine paste 10 per cent..... Gallocyanine powder..... Gallocyanine powder.....	B B B By I S S Q	78,253	\$27,227
627	MODERN CYANINE.....1906 Action of aromatic diamines upon Gallocyanines and subsequent reduction.	DH	0	
628	GALLOCYANINE MS.....1894 Gallocyanine-sulphonic acid.	DH	0	
629	MODERN BLUE.....1905 Action of formaldehyde upon Gallocyanines, with subsequent reduction.	DH	0	
630	CYANAZURINE.....1909 Reduction of azylated Gallocyanines.	DH	0	
631	CHROMOCYANINE V.....1898 Sulphonic acids of Leuco-Gallocyanines.	DH	0	
632	ULTRA VIOLET LGP.....1907 Action of a Leuco-Cyanine upon a Gallocyanine.	S	2,646	
632a	ULTRA VIOLET (V. M.)..... Ultra Violet FKN (S.)..... Ultra Violet 943..... Ultra Violet B (S.; Kal. 1910).....	K K K S	1,722	1,206

## XIII. OXAZINE AND THIAZINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
633	INDALIZARIN R.....1893 Action of sulphites upon Gallocyanine-sulphonic acids.	DH	0	
634	INDALIZARIN GREEN..... Nitro-Gallocyanine-sulphonic acids.	DH	0	
635	MODERN VIOLET.....1898 Leuco-Gallocyanines.	DH	0	
636	PRUNE.....1896 Methyl ester of Gallocyanine.  $(CH_3)_2N[4]C_6H_3 \left\{ \begin{array}{c} [1] \\ -N- \\ [2] \\ -O- \\   \\ Cl \end{array} \right\} C_6H \left\{ \begin{array}{c} [6]CO_2CH_3 \\ [4]OH \\ [3]OH \end{array} \right.$		3,197	\$2,218
	Prune pure.....	S	1,687	
	Prune 516.....	Lev	1,510	
637	GALLAMINE BLUE extra paste.....1889 Amide of Gallocyanine.  $(CH_3)_2N[4]C_6H_3 \left\{ \begin{array}{c} [1] \\ -N- \\ [2] \\ -O- \\   \\ Cl \end{array} \right\} C_6H \left\{ \begin{array}{c} [6]CONH_2 \\ [4]OH \\ [3]OH \end{array} \right.$	G	2,756	
638	AMIDO GALLAMINE BLUE.....1908 Action of ammonia upon Gallocyanines derived from gallamide and subsequent reduction.	DH	0	
639	GALLANTILIC VIOLET R. B.....1889 Anilides of dimethyl- and diethyl-Gallocyanines.	DH	0	
640	MODERN AZURINE DH.....1907 Action of acids upon anilido-Gallocyanines or their leuco derivatives.	DH	0	
641	CELESTINE BLUE B (COREINE 2 R).....1893 Amide of diethyl-Gallocyanine.  $(C_2H_5)_2N[4]C_6H_3 \left\{ \begin{array}{c} [1] \\ -N- \\ [2] \\ -O- \\   \\ Cl \end{array} \right\} C_6H \left\{ \begin{array}{c} [6]CONH_2 \\ [4]OH \\ [3]OH \end{array} \right.$	By	1,320	
642	PHENOCYANINE TC.....1893 Diethyl-amido-oxy-phenoxazone-oxy-phenyl ester.	DH	0	
643	PHENOCYANINE TV.....1893 Sulphonic acid of diethyl-amido-oxy-phenoxazone-oxy-phenyl ester.	DH	0	
644	ULTRACYANINE B.....1908 Condensation of Gallocyanine with resorcin.	S	0	
645	GALLAZINE A.....1893 Condensation of Gallocyanine with 2-naphthol-6-sulphonic acid, and subsequent oxidation.	DH	0	
646	COREINE AR. AB.....1894 Action of aniline upon Coreine 2 R (No. 641), and subsequent sulphonation.	DH	0	
647	RESORCIN BLUE.....1898 Tannin compound of dimethyl-amido-phenoxazone.	M	0	
648	IRIS BLUE.....1890 Ammonium salt of tetrabromo-resorufin.	B	0	

## XIII. OXAZINE AND THIAZINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
649	COTTON BLUE.....1879 Zn <sub>2</sub> double chloride of dimethyl-amido-naphtho-phenazox- onium chloride. $(\text{CH}_3)_2\text{N}[4]\text{C}_6\text{H}_3 \begin{Bmatrix} \text{[1]} \\ \text{---N---} \\ \text{[2]} \\ \text{---O---} \\ \text{Cl} \end{Bmatrix} \text{C}_{10}\text{H}_7$		32,508	\$3,675
	Fast Blue RD..... Fast Blue 62105..... Cotton Blue R extra powder..... Cotton Blue RN..... Cotton Blue N (S.)..... New Blue RR..... New Blue RG (S.)..... Fast Navy Blue 1222. (Current marks, BM, GM, MM, RM.)..... Fast Navy Blue RZOO..... Fast Navy Blue A..... Fast Navy Blue BNNOO..... Naphthol Blue 2 R extra (Kal. 1906)..... Naphthol Blue 2 R extra conc. (Kal. 1906)..... Fast Sailor Blue A..... Fast Sailor Blue R..... Meldola's Blue 3 R conc..... Fast Cotton Blue 5754..... Fast Cotton Blue 5755.....	A A B B B B By K GrE GrE GrE tM tM AW AW S Q Q		
650	NEW BLUE B, G.....1889 Dimethyl-amido-dimethyl-amido-anilido-naphtho-phenazox- onium chloride.	C	0	
651	NEW METHYLENE BLUE GG.....1890 Tetramethyl-diamido-naphtho-phenazoxonium chloride.	C	0	
652	NEW FAST BLUE F, H.....1892 Condensation of tetra-alkyl-diamido-benzhydrols with oxazines. <i>From Meldola's Blue and Michler's hydrol:</i> $(\text{C}_2\text{H}_5)_2\text{N}[4]\text{C}_6\text{H}_3 \begin{Bmatrix} \text{[1]} \\ \text{---N---} \\ \text{[2]} \\ \text{---O---} \\ \text{Cl} \end{Bmatrix} \text{C}_{10}\text{H}_7 \cdot \text{CH} \begin{Bmatrix} \text{C}_6\text{H}_4 \cdot \text{N}(\text{CH}_3)_2 \\ \text{C}_6\text{H}_4 \cdot \text{N}(\text{CH}_3)_2 \end{Bmatrix} \cdot \text{HCl}$	By	0	
652a	NEW FAST BLUE R..... New Fast Blue R..... New Fast Blue RS.....	I I	2,502	\$74
653	NILE BLUE.....1888 Diethyl-diamido-naphtho-phenazoxonium sulphate. $(\text{C}_2\text{H}_5)_2\text{N}[4]\text{C}_6\text{H}_3 \begin{Bmatrix} \text{[1]} \\ \text{---N---} \\ \text{[2]} \\ \text{---O---} \\ \text{SO}_2\text{H} \end{Bmatrix} \text{C}_{10}\text{H}_7[4]\text{NH}_2$		1,518	\$45
	Nile Blue A..... Nile Blue B..... Nile Blue R.....1906	B B B		
654	NILE BLUE 2 B.....1891 Diethyl-benzyl-diamido-naphtho-phenazoxonium chloride.	B	0	
655	MUSCARINE.....1885 Dimethyl-amido-oxy-naphtho-phenazoxonium chloride.	DH	0	
656	ALIZARIN GREEN G.....1895 Dioxy-naphthazoxonium sulphonate.	WD	0	
657	ALIZARIN GREEN B.....1895 Dioxy-naphthazoxonium sulphonate. $\text{O}_2\text{S}[2]\text{C}_{10}\text{H}_7 \begin{Bmatrix} \text{[1]} \\ \text{---N---} \\ \text{[2]} \\ \text{---O---} \end{Bmatrix} \text{C}_{10}\text{H}_7 \begin{Bmatrix} \text{[3]OH} \\ \text{[4]OH} \end{Bmatrix}$	WD	0	

## XIII. OXAZINE AND THIAZINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
657a	BRILLIANT ALIZARIN GREEN.....	WD	551	
658	FAST BLACK.....1889 Action of nitroso-dimethyl-aniline hydrochloride upon m-oxy- diphenylamine.	L	0	
658a	GALLOPHENINE P (R. 70. An oxazine color).....	By	1,960	
	B. THIAZINE COLORS.			
59	METHYLENE BLUE.....1876 Chloride, or zinc double chloride, of tetramethyl-diamido- phenazthionium. $(CH_3)_2N(4)C_6H_4 \left\{ \begin{array}{c} [1] \\ -N- \\ [2] \\ -S- \\   \\ Cl \end{array} \right\} C_6H_4(4)N(CH_3)_2$		185,738	\$72,619
	Methylene Blue 2 BD.....	A		
	Methylene Blue 2 BD 90484.....	A		
	Methylene Blue BX.....	A		
	Methylene Blue BB.....	B		
	Methylene Blue B conc.....	B		
	Methylene Blue B extra crystals.....	B		
	Methylene Blue BEX extra fine powder.....	B		
	Methylene Blue BG.....	B		
	Methylene Blue BGN.....	B		
	Methylene Blue HGG.....	B		
	Methylene Blue MD.....	B		
	Methylene Blue MDX.....	B		
	Methylene Blue B 27391.....	By		
	Methylene Blue BB.....	By		
	Methylene Blue 83 D 1383. (Current marks, BB, DBB, J. O.).....	C		
	Methylene Blue FKIL. (Current mark, 2 B.).....	K		
	Methylene Blue L.....	K		
	Methylene Blue conc. 20 per cent red.....	M		
	Methylene Blue BB.....	M		
	Methylene Blue DBBM conc. 20 per cent red.....	M		
	Methylene Blue DDBM conc.....	M		
	Methylene Blue MEDZ crystals.....	M		
	Methylene Blue MEDZ powder.....	M		
	Methylene Blue 3 R.....	M		
	Methylene Blue B extra conc. (zinc-free).....	tM		
	Methylene Blue B extra conc. (zinc-free) STD.....	tM		
	Methylene Blue BA extra conc.....	tM		
	Methylene Blue BG extra conc.....	tM		
	Methylene Blue 2 B conc.....	tM		
	Methylene Blue 52067.....	tM		
	Methylene Blue.....	WD		
	Methylene Blue 15746.....	P		
	Methylene Blue.....	G		
	Methylene Blue D 5582.....	I		
	Methylene Blue D (zinc-free, medic.).....	I		
	Methylene Blue G conc.....	I		
	Methylene Blue BB.....	S		
	Methylene Blue (medium large crystals).....	S		
	Methylene Blue 8 extra.....	CH		
	Methylene Blue 2 B.....	H		
	Methylene Blue.....	Q		
650a	TOLUIDINE BLUE.....			
	Toluidine Blue (S.; S. J., 4th ed., 592).....	B		
	Toluidine Blue (S.).....	M		
650b	GENTIANINE A (S.; S. J., 4th ed., 587). A mixture of Methy- lene Blue and Lauth's Violet (hydrochlorate of Thionine).....	G	220	
660	METHYLENE GREEN.....1886 Nitro-Methylene Blue. $(CH_3)_2N(4)C_6H_4 \left\{ \begin{array}{c} [1] \\ -N- \\ [2] \\ -S- \\   \\ Cl \end{array} \right\} C_6H_4 \left\{ \begin{array}{c} [3]NO_2 \\ [4]N(CH_3)_2 \end{array} \right.$		20,312	13,196

## XIII. OXAZINE AND THIAZINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
660	<b>METHYLENE GREEN—Continued.</b> Methylene Green U..... Methylene Green BX..... Methylene Green..... Methylene Green BX..... Methylene Green 247..... Methylene Green N (extra yellow)..... Methylene Green F..... Methylene Green T..... Methylene Green F (for silk)..... Methylene Green extra conc.....	B B K K K M G G I S		
661	<b>THIONINE BLUE.</b> .....1895 Zinc double chloride of trimethyl-ethyl-diamido-phenasthionium chloride. $(CH_3)_2N[4]C_6H_5 \left\{ \begin{array}{c} [1] \\ -N- \\ [2] \\ -S- \\   \\ Cl \end{array} \right\} C_6H_5[4]N(CH_3)(C_2H_5)$ Thionine Blue OO..... Thionine Blue 3 O..... Thionine Blue GO extra..... Thionine Blue GO (old).....	A A A M	12, 618	\$7, 872
662	<b>THIOCARMINE R.</b> .....1890 Sodium salt of diethyl-dibenzyl-diamido-phenasthionium-disulphonic acid. $C_6H_5[4]N(C_2H_5)CH_2 \cdot C_6H_5 \cdot SO_2Na$ $\begin{array}{c} N \quad S \\   \quad   \\ C_6H_5[4] - N(C_2H_5)CH_2 \cdot C_6H_5 \cdot SO_3 \end{array}$	C	1, 399	
663	<b>NEW METHYLENE BLUE.</b> ..... Diethyl-diamido-toluphenasthionium chloride. $(C_2H_5)_2HN[4]C_6H_5 \left\{ \begin{array}{c} [1] \\ -N- \\ [2] \\ -S- \\   \\ Cl \end{array} \right\} C_6H_5 \left\{ \begin{array}{c} [3]CH_3 \\ [4]NH(C_2H_5) \end{array} \right.$ Methylene Blue NNX..... Methylene Blue AN..... Methylene Blue VN..... New Methylene Blue F (S.; Kal. 1905).....1903 New Methylene Blue EEE 441. (Current marks, GB, GG, N, NSS, NK, R, 3 R.)..... New Methylene Blue 17 F 985..... New Methylene Blue 3 H 444..... New Methylene Blue TT 400.....	B B B By C C C C	30, 302	12, 127
664	<b>LEUCO-GALLO THIONINE DH.</b> .....1906 Action of alkyl-p-diamine-thio-sulphonates upon gallic acid and its derivatives.	DH	0	
665	<b>URANIA BLUE.</b> .....1896 Conjoint oxidation of β-dinaphthyl-m-phenylene-diamine-disulphonic acid and p-amido-dimethyl-aniline-thio-sulphonic acid.	WD	122	
666	<b>INDOCHROMOGEN S.</b> .....1893 Action of β-naphtho-quinone-disulphonic acid upon p-amido-diethylaniline-thiosulphonic acid.	S	0	
667	<b>INDOCHROMINE.</b> .....1892 Condensation of β-naphtho-quinone-disulphonic acid with dimethyl-p-phenylene-diamine-thio-sulphonic acid, and similar condensations between their homologues. Brilliant Alizarin Blue R powder..... Brilliant Alizarin Blue 3 H powder..... Brilliant Alizarin Blue D 3 G..... Brilliant Alizarin Blue D 6 G.....	By By M M	19, 060	12, 620



### XIII. OXAZINE AND THIAZINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
667	INDOCHROME—Continued. Brilliant Alizarin Blue DRI..... Indochromine RR powder..... Indochromine RR extra conc. double..... Indochromine T conc. .... Indochromine T conc. double extra..... Brilliant Alizarin Blue R powder.....	M S S S S CR		
667a	INDOCHROME BLACK EXD conc. powder.....	S	4,381	

#### XIV. AZINE COLORING MATTERS.

A. QUINOXALINE COLORS.				
668	FLAVINDULINE Phenyl-phenanthraphenazonium chloride.	1893	650	5378
$\text{C}_6\text{H}_5 \left\{ \begin{array}{c} \text{---N---} \text{---} \\ \text{---N---} \end{array} \right\} \text{C}_6\text{H}_5$ $\quad \quad \quad \uparrow$ $\quad \quad \quad \text{Cl} \text{---} \text{C}_6\text{H}_5$				
	Flavinduline II	B	500	
	Flavinduline O	B	150	
B. EUMODINES.				
669	NEUTRAL VIOLET. Conjoint oxidation of p-amido-dimethyl-aniline and m-phenylene-diamine.	1879	C	0
670	NEUTRAL RED. Hydrochloride of dimethyl-diamido-toluphenazine.	1879	C	0
$(\text{CH}_3)_2\text{N} \left[ \begin{array}{c} \text{---N---} \text{---} \\ \text{---N---} \end{array} \right] \text{C}_6\text{H}_4 \left\{ \begin{array}{c} \text{---} \text{---} \text{---} \\ \text{---} \end{array} \right\} \left[ \begin{array}{c} \text{---} \text{---} \text{---} \\ \text{---} \end{array} \right] \text{N} \text{H}_2 \text{HCl}$				
C. APOSAFRANINES.				
1. Rosindulines.				
671	INDULINE SCARLET. Amido-ethyl-tolu-naphthazonium chloride.	1892	B	186
$\text{H}_2\text{N} \left[ \begin{array}{c} \text{---N---} \text{---} \\ \text{---N---} \end{array} \right] \text{C}_6\text{H}_4 \left\{ \begin{array}{c} \text{---} \text{---} \text{---} \\ \text{---} \end{array} \right\} \text{C}_6\text{H}_4 \text{---} \text{CH}_3$ $\quad \quad \quad \uparrow$ $\quad \quad \quad \text{Cl} \text{---} \text{C}_6\text{H}_5$				
672	AZO CARMINE Sodium salt of phenyl-rosinduline-disulphonic acid.	1888	17,500	5,458
Disulphonic acid of:				
$\text{C}_6\text{H}_5 \cdot \text{N} \left[ \begin{array}{c} \text{---N---} \text{---} \\ \text{---N---} \end{array} \right] \text{C}_6\text{H}_4 \left\{ \begin{array}{c} \text{---} \text{---} \text{---} \\ \text{---} \end{array} \right\} \text{C}_6\text{H}_4$ $\quad \quad \quad \uparrow$ $\quad \quad \quad \text{Cl} \text{---} \text{C}_6\text{H}_5$				
Azo Carmine G paste			B	
Azo Carmine GX			B	
673	AZOCARMINE B Acid sodium salt of phenyl-rosinduline-trisulphonic acid.	1888	B	0
674	ROSINDULINE 2 G. Sodium salt of rosindone-B-monosulphonic acid.	1900	K	0
675	ROSINDULINE G. Sodium salt of rosindone-N-monosulphonic acid.	1900	K	0

## XIV. AZINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
§. Isorosindulines.				
676	NEUTRAL BLUE R extra.....1882 Dimethyl-amido-phenyl-pheno-naphthazonium chloride. $(\text{CH}_3)_2\text{N}[4]\text{C}_6\text{H}_4\left\{\begin{array}{c} \text{---} \text{[1]N[1]---} \\ \text{---} \text{[2]N[2]---} \end{array}\right\}\text{C}_{10}\text{H}_8$ $\text{Cl} \text{ } \text{C}_6\text{H}_5$	AW	613	
677	BASLE BLUE R.....1886 Dimethyl-amido-tolyl-amido-tolyl-pheno-naphthazonium chloride. D. SAFRANINES. 1. Benzo-safranines.	DII	0	
678	FAST NEUTRAL VIOLET B.....1880 Dimethyl-diethyl-diamido-phenazonium chloride.	C	0	
679	SAFRANINE.....1859 Mixture of diamido-phenyl- and tolyl-tolazonium chlorides. Phenyl compound: $\begin{array}{c} \text{CH}_3[5] \\ \text{NH}_4[4] \end{array} \text{C}_6\text{H}_4\left\{\begin{array}{c} \text{---} \text{[1]N[1]---} \\ \text{---} \text{[2]N[2]---} \end{array}\right\}\text{C}_6\text{H}_4\left\{\begin{array}{c} \text{[5]CH}_3 \\ \text{[4]NH}_2 \end{array}\right\}$ $\text{Cl} \text{ } \text{C}_6\text{H}_5$ Brilliant Safranine G..... Safranine T extra conc..... Safranine TK..... Safranine FB extra..... Safranine FF extra..... Safranine 65 A 2188. (Current marks, G, GG, NT, S, SP.)..... Safranine 64 W 2184..... Safranine F..... Safranine F 11..... Safranine 1081..... Safranine B conc..... Safranine O..... Safranine (blue shade)..... Safranine B extra conc..... Safranine extra strong..... Safranine B superfine extra..... Safranine prima..... Safranine.....		59,921	\$21,873
680	METHYLENE VIOLET.....1887 Dimethyl-diamido-phenyl-phenazonium chloride. $(\text{CH}_3)_2\text{N}[4]\text{C}_6\text{H}_4\left\{\begin{array}{c} \text{---} \text{[1]N[1]---} \\ \text{---} \text{[2]N[2]---} \end{array}\right\}\text{C}_6\text{H}_4[4]\text{NH}_2$ $\text{Cl} \text{ } \text{C}_6\text{H}_5$ Methylene Violet 3 RA extra..... Safranine bluish.....	A B B B By C C K K K K M M L tM AW G H Q	1,521	614
681	NEW FAST GRAY.....1885 Oxidation of p-amido-dimethyl-aniline. New Fast Gray..... Methylene Gray ND powder..... Fast Gray RGB..... Fast Gray B..... Direct Gray B..... Direct Gray J.....	K K By M CG GrE P P	29,507	10,436
682	NIGRAMINE.....1889 Action of nitroso-dimethyl-aniline hydrochloride upon aniline hydrochloride.	CG	0	
683	SAFRANINE MN.....1887 Conjoint oxidation of p-amido-dimethyl-aniline and o- or p-toluidine. $(\text{CH}_3)_2\text{N}[4]\text{C}_6\text{H}_4\left\{\begin{array}{c} \text{---} \text{[1]N[1]---} \\ \text{---} \text{[2]N[2]---} \end{array}\right\}\text{C}_6\text{H}_4\left\{\begin{array}{c} \text{[3]CH}_3 \\ \text{[4]NH}_2 \end{array}\right\}$ $\text{Cl} \text{ } \text{C}_6\text{H}_5$	B	198	

## XIV. AZINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
684	<b>RHODULINE VIOLET.</b> .....1884 Alkylated safranines obtained by the action of p-nitroso-alkyl- aryl-amines upon phenyl- (or p-tolyl-) p-amido-o-toluidine, or upon symmetrical phenyl- (or p-tolyl-) p-amido-benzyl- o-toluidine.  <i>For example:</i> $(CH_3)_2N[4]C_6H_4\left\{\begin{smallmatrix} [1]N[1] \\ [2]N[2] \end{smallmatrix}\right\}C_6H_4\left\{\begin{smallmatrix} [5]CH_3 \\ [4]NH_2 \end{smallmatrix}\right\}$ $\quad \quad \quad \uparrow$ $\quad \quad \quad Cl\ C_6H_5$	By	1,991	
684a	<b>BRILLIANT RHODULINE VIOLET (S. 1912)</b> .....	By	99	
684b	<b>BRILLIANT RHODULINE RED B.</b> .....	By	661	
685	<b>TANNIN HELIOTROPE.</b> ..... Dimethyl-diamido-xylyl-xylophenazonium chloride.  $(CH_3)_2N[4]C_6H_4\left\{\begin{smallmatrix} [1]N[1] \\ [2]N[2] \end{smallmatrix}\right\}C_6H_4(CH_3)_2[4]NH_2$ $\quad \quad \quad \uparrow$ $\quad \quad \quad Cl\ C_6H_4(CH_3)_2$	C	1,398	
686	<b>AMETHYST VIOLET.</b> .....1883 Tetraethyl-diamido-phenyl-phenazonium chloride.	K	0	
687	<b>ROSOLANE O, T, R.</b> .....1888 Phenyl-diamido-phenyl-toluphenazonium chloride.	M	0	
688	<b>ROSOLANE, MAUVE.</b> .....1886 Salts of phenyl- and tolyl-safranines.  <i>Lowest homologue:</i> $NH_2[4]C_6H_4\left\{\begin{smallmatrix} [1]N[1] \\ [2]N[2] \end{smallmatrix}\right\}C_6H_4[4]NHC_2H_5$ $\quad \quad \quad \uparrow$ $\quad \quad \quad Cl\ C_6H_5$	P	796	
689	<b>INDAZINE M.</b> .....1888 Mixture of dimethyl-phenyl-safranine chloride and its di- methyl-amido-anilido derivative.	C	0	
690	<b>METAPHENYLENE BLUE R.</b> .....1893 Oxidation of amido-dimethyl-aniline and di-p-tolyl-m- phenylene-diamine.	C	0	
691	<b>METAPHENYLENE BLUE 2 B.</b> .....1888 Dimethyl-tolyl-diamido-tolyl-phenazonium chloride.  $C_7H_7NH[4]C_6H_4\left\{\begin{smallmatrix} [1]N[1] \\ [2]N[2] \end{smallmatrix}\right\}C_6H_4[4]N(CH_3)_2$ $\quad \quad \quad \uparrow$ $\quad \quad \quad Cl\ C_7H_7$	C	50	
692	<b>NAPHTHAZINE BLUE.</b> .....1892 Sodium salt of the disulphonic acid of dimethyl-β-naphthyl- diamido-β-naphthyl-phenazonium.  <i>Probable composition:</i> $C_{16}H_8N[4]C_6H_4\left\{\begin{smallmatrix} N \\ N \end{smallmatrix}\right\}C_6H_4[4]N(CH_3)_2$ $\quad \quad \quad \parallel$ $SO_3 \quad \quad \quad C_{16}H_8 \cdot SO_3Na$	WD	265	
692a	<b>NAPHTHAZINE NAVY BLUE 156.</b> ..... <i>β. Naphtho-safranines.</i>	WD	5,996	
693	<b>MILLING BLUE BC.</b> .....1890 Sodium salt of a sulphonic acid of diphenyl-diamido-phenyl- naphthazonium chloride.  <i>Sulphonic acid of:</i> $C_6H_5NH \cdot C_{10}H_6\left\{\begin{smallmatrix} N \\ N \end{smallmatrix}\right\}C_{10}H_6 \cdot NH \cdot C_6H_5$ $\quad \quad \quad \uparrow$ $\quad \quad \quad Cl\ C_6H_5$	K	3,083	

## XIV. AZINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manuf- fac-turer.	Importation.	
			Pounds.	Value.
694	FAST PINK.....1868 Mixture of amido-naphthyl-naphthazonium chloride and di-amido-naphthyl-naphthazonium chloride.  <i>Monoamido compound:</i> $\text{H}_2\text{N} \cdot \text{C}_{10}\text{H}_7 \left( \begin{array}{c} -\text{N}- \\   \\ -\text{N}- \end{array} \right) \text{C}_{10}\text{H}_7$ $\quad \quad \quad \downarrow$ $\quad \quad \quad \text{Cl C}_{10}\text{H}_7$  Fast Pink BN double conc..... Fast Pink GN double conc.....	I I	597	\$344
695	PARAPHENYLENE VIOLET.....1888 Action of p-phenylene-diamine upon α-amido-azo-naphthalene.	WD	0	
695a	DIPHENE BLUE B (S.; S. J., 4th ed., 285)..... A naphthazonium color.  E. INDULINES.	A	4,738	
696	INDAMINE BLUE R, B.....1888 Amido-dianilido-phenyl-phenazonium chloride.	M	0	
697	INDULINE (spirit soluble).....1863 Mixtures of amido-, dianilido-, trianilido-, and tetraanilido-phenyl-phenazonium chlorides.  <i>Tetraanilido compound:</i> $\text{C}_6\text{H}_4\text{NH}[3] \left( \begin{array}{c} (\text{U}) \\ -\text{N}- \\   \\ [2] \\ -\text{N}- \end{array} \right) \text{C}_6\text{H}_4 \left[ \begin{array}{l} 3(\text{NHC}_6\text{H}_5) \\ 4[\text{NHC}_6\text{H}_5] \end{array} \right]$ $\quad \quad \quad \downarrow$ $\quad \quad \quad \text{Cl C}_6\text{H}_5$  Induline conc..... Fast Blue B..... Indigene R..... Induline BA..... Blue PCN paste..... Induline S..... Induline 10350.....	G A AW P DH I I	25,342	5,418
698	NIGROSINE (soluble in spirit).....1867 Mixtures of indulines (No. 697) with allied bases and fluorindines, obtained by heating nitrobenzene, aniline, and aniline hydrochloride with iron.  Nigrosine s. i. s..... Nigrosine B s. i. s..... Nigrosine powder..... Nigrosine OL..... Nigrosine SML..... Nigrosine SUL..... Nigrosine 419..... Nigrosine 1091..... Nigrosine 1455..... Nigrosine 1951..... Nigrosine 1952..... Nigrosine 1953..... Nigrosine 5782..... Nigrosine 5783..... Nigrosine 5785..... Nigrosine 5786..... Nigrosine Oil 5781..... Spirit Jet Nigrosine 24618..... Nigrosine 18872..... Nigrosine powder 10..... Nigrosine soluble in alcohol..... Nigrosine lumps soluble in fat..... Nigrosine small grains..... Nigrosine crystals..... Nigrosine B s. i. s..... Nigrosine BTR grains..... Nigrosine T crystals..... Nigrosine TTR..... Nigrosine Base 2 B soluble in amyl acetate..... Nigrosine Base R.....	A A K K K K K K K K K K K K K K G E CJ tM tM tM tM tM tM tM tM tM tM	186,540	23,435

## XIV. AZINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
668	NIGROSINE—Continued.			
	Nigrosine Base.....	WD		
	Spirit Nigrosine.....	WD		
	Black CBR.....	P		
	Black C2N.....	P		
	Nigrosine 2 B powder conc.....	G		
	Nigrosine BC crystals.....	G		
	Nigrosine BT grains.....	G		
	Nigrosine TRT grains.....	G		
	Nigrosine Black.....	H		
	Spirit Nigrosine LM.....	H		
	Spirit Nigrosine P.....	H		
	Nigrosine 16635.....	Q		
668a	GRAY NO (S. 1907).....	S	55	
699	INDULINE (soluble in water)..... 1867		31,775	\$5,514
	Mixtures of the sodium salts of the sulphonic acids of the various spirit-soluble indulines.			
	Induline NN.....	B		
	Fast Blue R.....	B		
	Induline WLX.....	B		
	Induline B.....	By		
	Induline NBL.....	By		
	Fast Blue R.....	K		
	Induline RN.....	K		
	Induline 1768.....	K		
	Induline 1778.....	K		
	Fast Blue O soluble.....	M		
	Induline 2 B (soluble in water).....	CJ		
	Solid Blue SBAOOO.....	GrE		
	Solid Blue SBSOOO.....	GrE		
	Solid Blue Base SBXBX.....	GrE		
	Fast Blue SOOO.....	GrE		
	Fast Blue extra.....	tM		
	Induline DB extra.....	tM		
	Induline N extra.....	tM		
	Fast Blue B.....	AW		
	Solid Blue 3 R.....	E		
	Induline 38724.....	H		
	Induline 38725.....	H		
	Fast Blue.....	Q		
	Solid Blue RX.....	Q		
699a	INDULINE RED.....		2,330	612
	Induline Red 1616.....	K		
	Induline Red 1650.....	K		
699b	FAST BLUE (V. M.).....		747	132
	Fast Blue AOOO.....	GrE		
	Fast Blue 3 BB.....	GrE		
699c	INDOCYANINE 'B' (S.; Kal. 1905; R. 56).....	G	4,325	
700	NIGROSINE (soluble in water).....		394,718	55,903
	Sodium salts of sulphonic acids of spirit nigrosines (No. 698).			
	Nigrosine s. l. w. lumps.....	A		
	Nigrosine s. l. w. AD.....	A		
	Nigrosine AR s. l. w.....	A		
	Nigrosine FAL s. l. w.....	A		
	Nigrosine FAR s. l. w.....	A		
	Nigrosine 3 G s. l. w. lumps.....	A		
	Silver Gray P.....	A		
	Nigrosine C base.....	B		
	Nigrosine MS.....	B		
	Nigrosine T.....	B		
	Nigrosine WG.....	B		
	Nigrosine WL grains.....	B		
	Nigrosine WL powder.....	B		
	Nigrosine WLA grains (S.).....	B		
	Nigrosine WLA lumps.....	B		
	Nigrosine WLAN.....	B		
	Nigrosine WLASB.....	B		
	Nigrosine WLASG.....	B		
	Nigrosine WLASG powder.....	B		
	Nigrosine WLG.....	B		
	Nigrosine WLG (brilliant grains).....	B		
	Nigrosine WLN.....	B		
	Nigrosine WLP (brilliant grains).....	B		
	Nigrosine WLY extra 13513 grains.....	B		

## XIV. AZINE COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
700	<b>NIGROSINE—Continued.</b> Nigrosine K..... Nigrosine N B L..... Nigrosine L 84..... Silver Gray N..... Induline Black base 5789..... Nigrosine Crystals WS..... Nigrosine Crystals 146..... Nigrosine Crystals 1966..... Nigrosine 3307..... Nigrosine 4614..... Nigrosine (soluble in water) 19665..... Nigrosine (soluble in water) AR..... Nigrosine Black B..... Nigrosine K 3 B..... Nigrosine KSB..... Nigrosine KW..... Nigrosine KWR..... Nigrosine NJKSB..... Nigrosine B..... Nigrosine B powder..... Nigrosine B grains..... Nigrosine B extra..... Nigrosine 2 B grains..... Nigrosine 2 B powder conc..... Nigrosine 3 B grains (Kal. 1911)..... Nigrosine D..... Nigrosine IAA (soluble in water) grains..... Nigrosine 14029..... Nigrosine 16633..... Nigrosine O..... Nigrosine T 8954..... New Nigrosine..... Nigrosine B (soluble in water)..... Nigrosine BB (soluble in water)..... Nigrosine L..... Nigrosine 14029.....	By By C C K K K K CJ CJ CJ CJ GRE GRE GRE GRE GRE GRE tM tM tM tM tM tM tM tM WD WD WD WD AW I S S		
700a	<b>BLACK (V. M.)</b> ..... Black AJ..... Black NSA..... Black 31604.....	P P P	3,594	\$396
701	<b>PARAPHENYLENE BLUE R</b> .....1886 Fusion of p-phenylene-diamine with amido-azo-benzene hydrochloride.	WD	0	
702	<b>PARA BLUE</b> .....1990 Action of p-phenylene-diamine upon Aniline Blue (No. 521).	CG	0	
703	<b>RUBRAMINE</b> .....1889 Action of nitroso-dimethyl-aniline hydrochloride upon p-toluidine and o-toluidine.	CG	0	
704	<b>INDAMINE 3 R</b> .....1889 Action of nitroso-dimethyl-aniline hydrochloride upon o-toluidine hydrochloride.	CG	0	
705	<b>INDAMINE 6 R</b> .....1889 Action of nitroso-dimethyl-aniline hydrochloride upon a mixture of o-toluidine and p-toluidine hydrochlorides.	CG	0	
705a	<b>INDOCYANINE (V. M.)</b> ..... Indocyanine B (S.; Kal. 1905; R. 56)..... Indocyanine 2 R F (S.; Kal. 1908).....	A A	23,138	5,205
705b	<b>ACID CYANINE BF (S.; Kal. 1909, 1911; R. 56)</b> .....	A	43,032	

## XV. SULPHUR COLORING MATTERS.

(The constitution of these coloring matters is at present unknown except in a few rare cases.)

706	<b>CACHOU DE LAVAL</b> .....1873 Obtained by heating organic substances such as sawdust, bran, spent dyewood powder, etc., with sodium sulphide.	P	0	
707	<b>SULPHINE BROWN</b> .....1898 Action of sodium polysulphide upon unsaturated fatty acids, their esters and alkaline salts.	LD	0	

## XV. SULPHUR COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
708	SULPHANILINE BROWN.....1901 Action of sodium polysulphide upon sulphite-cellulose waste. Sulphaniline Brown O..... Sulphaniline Brown R.....	K K	11,327	\$1,152.
	NOTE.—The three dyes enumerated above are not derived from coal-tar crudes, although usually included in lists of coal-tar colors.			
709	PYROGENE GREEN 2 G.....1895 Fusion of p-nitrophenol with caustic soda, sulphur, and copper sulphate.	I	222	
710	IMMEDIAL YELLOW D.....1902 Fusion of m-toluylene-diamine with sulphur at 190° C. Immedial Yellow 14 D 908. (Current marks, D, GG, 1452 J.)... Immedial Yellow 27 R 1246.....	C C	12,325	2,222.
711	IMMEDIAL ORANGE C.....1902 Fusion of m-toluylene-diamine with sulphur at 250° C.	C	500	
712	KRYOGENE YELLOW G.....1903 Fusion of a mixture of m-toluylene-dithio-urea and benzidine with sulphur. Kryogene Yellow G extra N..... Kryogene Yellow GG extra.....	B B	1,122	252.
713	THIOPHOR BRONZE 5 G.....1908 Fusion of a mixture of p-phenylene-diamine and p-amido-aceto-black with sulphur.	CJ	0	
714	THIOPHOR YELLOW BRONZE G.....1909 Fusion of a mixture of p-phenylene-diamine and p-amido-acetanilide with benzidine and sulphur.	CJ	0	
715	THIO CATECHINE.....1895 Fusion of p-diamines or acetyl-nitramines with sodium polysulphide.	P	0	
716	KRYOGENE YELLOW R extra.....1902 Fusion of m-toluylene-dithio-urea with sulphur.	B	4,504	
717	VIDAL BLACK.....1893 Fusion of p-amido-phenol (or of p-amido-phenol and other compounds) with sodium polysulphide.	P	7,425	
718	ST. DENIS BLACK.....1899 Phenol is treated with sulphur-chloride, and the product is brought into reaction with p-phenylene-diamine and nitrobenzene or with homologues of diphenylamine and indophenol. The resultant substance is treated with sulphur and sodium sulphide.	P	0	
719	THIONAL BLACK G conc. (S.; Kal. 1913).....1900 From p-, o-, or m-nitrobenzene-azo-o-nitrophenol, or a mixture of equal molecules of the latter and benzene-azo-o-nitrophenol, by fusion with sodium polysulphide.	S	16,925	
720	SULPHUR BLACK.....1899 Treatment of 1,2,4-dinitro-phenol with sodium polysulphide. Sulphur Black T extra..... Sulphur Black T extra M..... Sulphur Black T extra 79964..... Sulphur Black T extra 65621..... Sulphur Black T extra strong 65 : 100..... Kryogene Black TGO.....1904 Immedial Carbon 49 L 1790. (V.M.) (Current marks, B, BL, JHJ, 1698 J, R, RBS, RS.) Immedial Carbon 28 P 1269..... Immedial Carbon 27 Q 1245..... Thiocarbonyl NNG..... Thiophenol Black T extra.....	A A A A A B C C C C I	502,309	54,557

## XV. SULPHUR COLORING MATTERS—Continued.

The following 100 sulphur-black dyes, falling under 18 headings, include all not specifically mentioned in Schultze's "Farbstofftabellen" and found under other serial headings in this section. The latter are 25 in number, falling under 6 headings. The arrangement adopted in this section is described on p. 39.

The total amount of all sulphur-black dyes imported into the United States during the fiscal year 1913-14 was 5,615,458 pounds. The total invoiced value was \$558,909.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>SULPHUR BLACK</b> .....		<b>3,703,979</b>	<b>\$368,939</b>
720(A)a	Sulphur Black.....	A		
720(A)b	Sulphur Black 108583.....	A		
720(A)c	Sulphur Black A extra (S.; Kal. 1905).....	A		
720(A)c	Sulphur Black A extra 69775.....	A		
720(A)c	Sulphur Black A extra conc. (S.; Kal. 1905).....	A		
720(A)c	Sulphur Black A extra J.....	A		
720(A)c	Sulphur Black A extra M (S.; Kal. 1905).....	A		
720(A)c	Sulphur Black A extra S (S.; Kal. 1905).....	A		
720(A)c	Sulphur Black A extra strong (S.; Kal. 1905).....	A		
720(A)c	Sulphur Black A extra strong 70:100.....	A		
720(A)c	Sulphur Black A extra strong M.....	A		
720(A)c	Sulphur Black A extra strong S.....	A		
720(A)c	Sulphur Black A extra strong, new.....	A		
720(A)d	Sulphur Black A W extra (S.; Kal. 1907).....	A		
720(A)d	Sulphur Black A W extra J.....	A		
720(A)d	Sulphur Black A W extra M (S.; Kal. 1907).....	A		
720(A)d	Sulphur Black A W extra, new.....	A		
720(A)e	Sulphur Black A W L extra (S.; Kal. 1913).....	A		
720(A)f	Sulphur Black 2 B extra conc. 50:100.....	A		
720(A)g	Sulphur Black 2 B extra strong 75:100.....	A		
720(A)h	Sulphur Black 4 B extra (S.; Kal. 1904).....	A		
720(A)i	Sulphur Black FAG extra strong 87½:100.....	A		
720(A)i	Sulphur Black FAG extra strong J.....	A		
720(A)i	Sulphur Black FAG extra strong S.....	A		
720(A)i	Sulphur Black FAG extra strong M.....	A		
720(B)y	Sulphur Black FAG extra strong, new.....	A		
720(A)j	Sulphur Black FT extra M.....	A		
720(A)k	Sulphur Black H.....	A		
720(A)l	Sulphur Black JBL conc.....	A		
720(A)l	Sulphur Black JBL conc. M.....	A		
720(A)l	Sulphur Black JBL conc. S.....	A		
720(A)l	Sulphur Black JBL conc., new.....	A		
720(A)m	Sulphur Black TFA.....	A		
720(A)m	Sulphur Black TG extra.....	A		
	<b>KYROGENE BLACK</b> .....		<b>121,904</b>	<b>12,263</b>
720(B)a	Kyrogene Black TBO (S.; R. 66).....	1904		
720(B)b	Kyrogene Black TG (R. 66).....	B		
720(B)c	Kyrogene Black TGE.....	B		
	<b>KATIGENE BLACK</b> .....		<b>34,699</b>	<b>2,711</b>
720(B)y	Katigene Black SWR extra 23875 (S.).....	1902		
720(B)y	Katigene Black T 3 B (S.; Kal. 1907).....	By		
720(B)y	Katigene Black TW extra (S.).....	By		
720(B)y	Katigene Black TW extra 27028.....	By		
720(B)y	Katigene Black TX (S.; Kal. 1908).....	By		
720(B)y	Katigene Black 26744.....	By		
720(B)y	<b>KATIGENE BLUE BLACK 4 BPA (Kal. 1905)</b> .....	By	<b>49,310</b>	
	<b>KATIGENE BRILLIANT BLACK</b> .....		<b>602</b>	<b>75</b>
720(B)y	Katigene Brilliant Black B extra (S.).....	1904		
720(B)y	Katigene Brilliant Black FG extra.....	By		
	<b>KATIGENE DEEP BLACK</b> .....		<b>224,262</b>	<b>19,491</b>
720(B)y	Katigene Deep Black B (S. 1908).....	1907		
720(B)y	Katigene Deep Black B 27029 (S. 1908).....	By		
720(B)y	Katigene Deep Black B new (S. 1908).....	By		
720(B)y	Katigene Deep Black B new 27029 (S. 1908).....	By		
	<b>IMMEDIAL BRILLIANT CARBON</b> .....		<b>113,900</b>	<b>15,197</b>
720(C)a	Immedial Brilliant Black B (S.; Kal. 1907, 1908).....	C		
720(C)b	Immedial Brilliant Carbon F, FG (S.; Kal. 1908).....	C		
	<b>SULPHUR BLACK</b> .....		<b>323,715</b>	<b>32,084</b>
720(K)a	Sulphur Black 2 B.....	K		
720(K)a	Sulphur Black BR extra.....	K		
720(K)a	Sulphur Black BRH.....	K		
720(K)a	Sulphur Black GF.....	K		
720(K)a	Sulphur Black KCB.....	K		
720(K)a	Sulphur Black MA.....	K		
720(K)a	Sulphur Black TS.....	K		



## XV. SULPHUR COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>SULPHUR BLACK—Continued.</b>			
720(K)a	Sulphur Black 5274.....	K		
720(K)a	Sulphur Black 5276.....	K		
720(K)a	Sulphur Black 5285.....	K		
720(K)a	Sulphur Black 5289.....	K		
	<b>THION BLACK.....</b>		12, 817	\$1, 876
720(K)b	Thion Black BCN (S.). (Current marks B, 2 B, BAW, BC, 3 BC, G, 2 GC, N, NN, R, 2 R, 3 R, RR, RT, SR, TGN.).....	K		
720(K)b	Thion Black IC.....	K		
720(K)b	Thion Black (greenish) 11a.....	K		
	<b>THION VIOLET BLACK A.....</b>		19, 360	3, 471
720(K)c	Thion Violet Black (S.). (Current mark, A.).....	K		
720(K)c	Thion Violet Black 5264.....	K		
	<b>THIOGENE BLACK.....</b>		53, 069	7, 064
720(M)a	Thiogene Black BB liquid.....	M		
720(M)a	Thiogene Black BB extra (S.; Kal. 1907, 1910).....	M		
720(M)b	Thiogene Black 5 B conc.....	M		
720(M)c	Thiogene Black M conc. (S.; Kal. 1905).....	M		
720(M)d	Thiogene Black MA high conc. (S.; Kal. 1910).....	M		
720(M)e	Thiogene Black ML.....	M		
720(M)f	Thiogene Black MM conc.....	M		
720(M)g	Thiogene Black MZ conc. extra.....	M		
720(CJ)	<b>THIOPHOR BLACK WLN superior (S.; Kal. 1906, 1909).</b>	CJ	10, 141	
	<b>THIOXINE BLACK.....</b>		143, 471	11, 264
720(GrE)a	Thioxine Black AB0000.....	GrE		
720(GrE)b	Thioxine Black AB0000.....	GrE		
720(GrE)c	Thioxine Black 3 B000 (Kal. 1907).....	GrE		
720(GrE)d	Thioxine Black GB.....	GrE		
720(GrE)e	Thioxine Black 1151.....	GrE		
720(GrE)f	Thioxine Black 3705.....	GrE		
720(G)	<b>ECLIPSE BLACK C (S.).....</b>	G	2, 756	
	<b>PYROGENE DEEP BLACK.....</b>		13, 011	1, 724
720(I)a	Pyrogene Deep Black C (S.; Kal. 1908).....	I		
720(I)b	Pyrogene Deep Black D (S.; Kal. 1908).....	I		
720(I)c	Pyrogene Deep Black G (Kal. 1914).....	I		
720(Lev)a	<b>SULPHUR BLACK TR.....</b>	Lev	27, 394	
	<b>THIONOL BLACK.....</b>		6, 498	550
720(Lev)b	Thionol Black S.....	Lev		
720(Lev)b	Thionol Black XX.....	Lev		
	<b>CROSS DYE BLACK (Cl. No. 744).....</b>		38, 583	4, 739
720(H)a	Cross Dye Black BF 33 per cent (S.).....	H		
720(H)b	Cross Dye Black F.....	H		
720(H)c	Cross Dye Black FG.....	H		
720(H)d	Cross Dye Black JNS.....	H		
720(H)e	Cross Dye Black LCV 35 per cent.....	H		
720(H)f	Cross Dye Black M.....	H		
720(H)g	Cross Dye Black RX.....	H		
720(H)h	Cross Dye Black X 30.....	H		
720(H)i	Cross Dye Black (blue) extra.....	H		
721	<b>THIO COTTON BLACK.....</b> 1900 Fusion of a mixture of dinitro-phenol and p-amido- phenol-sulphonic acid with sodium polysulphide.	WD	0	
722	<b>AURONAL BLACK N 2 R extra paste (S.; Kal. 1900, 1908, 1909, 1911).....</b> Action of sodium polysulphide upon the sodium salt of dinitro-phenol in solution.	tM	5, 677	
722a	<b>AURONAL BLACK (V. M.).....</b>		45, 202	4, 643
	Auronal Black 3 extra paste.....	tM		
	Auronal Black 4 A strong.....	tM		
	Auronal Black 4 G strong (Kal. 1909).....	tM		
	Auronal Black 5 GL extra (Kal. 1914).....	tM		
	Auronal Black 3 A extra paste.....	G		
	Auronal Black 4 A extra conc.....	G		

## XV. SULPHUR COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
723	AUTOGENE BLACK EEB.....1907 Action of sodium polysulphide upon dinitro-phenol under special conditions of temperature, etc.	P	0	
724	IMMEDIAL BLACK.....1897 Fusion of dinitro-oxy-diphenylamine (from chloro-dinitro-benzene and p-amidophenol) with sodium polysulphide. Immedial Black 14 A 905 (S.). (Current marks, BF, FF, G, NB, NBB, NF, NG, NLN, NN, NNG, NNR, NNZ, NR, NRT, NV, V.) Immedial Black 9 C 782..... Immedial Black 23 E 1134..... Immedial Black 12 N 867..... Immedial Black 19 O 1043.....	C C C C C	51,000	\$6,193
724a	IMMEDIAL BLUE..... Immedial Blue 23 M 1141. (Current marks, C, CB, CH.) Immedial Blue 12 S 872.....	C C	2,907	364
725	IMMEDIAL BROWN.....1900 Fusion of dinitro-p-cresol, or of the product obtained from causticalkalies and dinitro-oxy-diphenylamine, with sodium polysulphide. Immedial Brown 14 C 907 (S.). (Current marks, B, BR, BU, G, RR, W.) Immedial Brown 5 L 660..... Immedial Brown 15 P 944..... Immedial Brown 24 R 1171..... Immedial Dark Brown 19 Q 1045. (Current marks, A, D.) Immedial Dark Brown 50 S 1822.....	C C C C C C	23,887	2,553
726	PYROGENE BLUE.....1900 Action of sodium polysulphide upon dinitro-oxy-diphenylamine, or upon indophenols, in alcoholic solution, under pressure. Pyrogene Blue RR double (S. 1903)..... Pyrogene Blue 2 RN conc. 400 per cent..... Pyrogene Direct Blue RL (Kaf. 1914)..... Pyrogene Direct Blue.....	I I I I	10,934	2,582
727	AURONAL BLACK B.....1901 Fusion of dinitro-p-amido-diphenylamine (from dinitro-chlorobenzene and p-phenylene-diamine) with sodium sulphide and glycerin.	tM	0	
728	IMMEDIAL SKY BLUE.....1901 Probably dimethyl-amido-oxy-phenazthionium-sulphide. Fusion of dimethyl-p-amido-p-oxy-diphenylamine with sodium polysulphide at 110° to 115°.  Probably: $(\text{CH}_3)_2\text{N} \begin{bmatrix} \text{---} \text{N} \text{---} \\ \text{---} \text{S} \text{---} \end{bmatrix} \text{C}_6\text{H}_4 \begin{bmatrix} \text{---} \text{OH} \\ \text{---} \text{S} \text{---} \end{bmatrix}$	C	0	
729	KRYOGENE PURE BLUE R.....1901 Fusion of Methylene Violet with alkaline polysulphides.	B	0	
730	PYROGENE BLACK G.....1901 Fusion of indophenols or of nitro-amido-oxy-diphenylamine with polysulphides.	I	3,725	
731	THIOPHOR INDIGO CJ.....1905 Treatment of the leuco compound of indophenol (obtained from a-naphthol and p-amido-dimethyl-aniline) with alkaline polysulphides.	CJ	0	
732	AUTOGENE BLACK.....1899 Condensation of amido- (or diamido-) oxy-diphenylamine with the product of the action of sulphur chloride upon phenol, cresol, or amines, and final fusion with sodium sulphide.	P	7,495	
733	IMMEDIAL INDONE.....1902 Fusion with polysulphides of the indophenol obtained from o-toluidine and p-amido-phenol. $\text{CH}_3 \begin{bmatrix} \text{---} \text{OH} \\ \text{---} \text{S} \text{---} \end{bmatrix} \text{C}_6\text{H}_4 \begin{bmatrix} \text{---} \text{NH} \text{---} \\ \text{---} \text{S} \text{---} \end{bmatrix} \text{C}_6\text{H}_4 \text{---} \text{OH}$		4,236	1,137

## XV. SULPHUR COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
733	<b>IMMEDIAL INDONE—Continued.</b> Immedial Indone 88 H 2271 (S.; Kal. 1914). (Current marks, B, 3 B, BF, BBF, BN, JBN, KB, R, RB, RR, RG, 17865.) Immedial Indone 68 J 2272..... Immedial Indone 68 K 2273..... Immedial Indone 68 L 2274..... Immedial Indone 17 M 991..... Immedial Indone 68 S 2281..... Immedial Indone 34 U 1424..... Immedial Indone 28 W 1276.....	C C C C C C C C		
733a	<b>IMMEDIAL INDONE VIOLET B (S.; Kal. 1910).....</b>	C		
734	<b>PYROGENE YELLOW</b> .....1900 Action of polysulphides upon nitro-, amido-, and oxy-nitro-amido-benzyl-amido compounds and upon oxy-benzylidene compounds. Pyrogene Yellow M..... Pyrogene Yellow O.....	I I	13,515	\$5,102
735	<b>PYROGENE INDIGO</b> .....1902 Fusion with polysulphides of the indophenol corresponding to phenyl-tolyl-amine or to phenyl-amido-p-oxy-diphenyl-amine. Pyrogene Indigo 250 per cent..... Pyrogene Indigo CL 200 per cent (Kal. 1908, 1913)..... Pyrogene Indigo GL..... Pyrogene Indigo 5 G 450 per cent (Kal. 1905)..... Pyrogene Indigo R..... Pyrogene Indigo RR.....	I I I I I I	22,661	6,652
736	<b>THION BLUE B</b> .....1903 Fusion with sodium polysulphide of the product of the reaction of carbon disulphide upon p-nitro-o-amido-p-oxy-diphenyl-amine.	K	4	
736a	<b>THION DIRECT BLUE 5130 (S). (Current marks, B, BG, BU, G, R, 2 R, THB, THR.)</b> .....	K	7,349	
737	<b>SULPHINE BROWN (COTTON BROWN)</b> .....1896 Fusion of nitrated diphenylamine-sulphonic acid with sodium polysulphide. Sulphine Brown B..... Sulphine Brown B conc. 200 per cent..... Sulphine Brown G.....	CG CG CG	2,206	188
738	<b>COTTON BLACK</b> .....1896 Fusion with sodium polysulphide of o-p-dinitro-diphenyl-amine-sulphonic acid (from dinitro-chloro-benzene and m- (or p-) amido-benzene-sulphonic acid).	WD	0	
739	<b>IMMEDIAL MAROON B</b> .....1900 Fusion with sodium polysulphide of amido-oxy-phenazines, their homologues or derivatives. For example, safranin. Immedial Bordeaux G..... Immedial Maroon B.....	C C	15,496	2,535
740	<b>FAST BLACK B</b> .....1893 Action of sodium sulphide in aqueous solution upon 1:8-dinitro-naphthalene.	B	0	
741	<b>FAST BLACK BS</b> .....1894 Action of alkalis upon Fast Black B (No. 740).	B	0	
742	<b>PRINTING BLUE FOR WOOL</b> .....1895 Reduction of 1:8-dinitro-naphthalene with sodium sulphide in presence of sodium sulphite and caustic soda.	B	0	
743	<b>KRYOGENE BROWN A</b> .....1895 Fusion with sodium polysulphide of the product obtained by reduction of 1:8-dinitro-naphthalene by sodium sulphide in presence of sodium sulphite.	B	0	
744	<b>SULPHO BLACKS B, 2 B, etc.</b> .....1890 Fusion of a variety of amido compounds and phenols with sodium polysulphide.	H	0	
745	<b>MELANOGENE BLUE</b> .....1900 Action of polysulphides upon 1:5-dinitro-naphthalene.	M	0	

## XV. SULPHUR COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
746	<b>KATIGENE GREEN</b> .....1904 Action of sodium polysulphide upon 1-aryl-amido-4-p-oxy-phenyl-amido-naphthalene-sulphonic acid, in the presence of copper salts.  <i>Example:</i> $\text{HO}[\text{I}]\text{C}_6\text{H}_4[\text{4}]-\text{NH}-[\text{4}]\text{C}_6\text{H}_5\left\{\begin{array}{l} \text{[1]NH.C}_6\text{H}_5 \\ \text{[8]SO}_3\text{H} \end{array}\right.$ Katigene Green 2 B (S. 1900)..... Katigene Green 4 B (Kal. 1905)..... Katigene Green 2 G (Kal. 1906)..... Katigene Green 2 G conc. 27276..... Katigene Green MK extra (Kal. 1914)..... Immedial Green 23 F 1144 (S.). (Current marks, BB, BBX, GG, GGX.)..... Immedial Green 69 S 2308..... Immedial Green 23 U 1146..... Immedial Green 35 X 1452..... Immedial Green Blue 43 S 1647..... Pyrogene Blue Green B.....	By By By By By C C C C C C I	63,900	\$9,950
747	<b>THIONAL RED BROWN</b> .....1902 Action of sodium polysulphide upon 6-oxy-naphtho-quinone-aryl-imido compounds at 240°-280° C.	S	110	
748	<b>HYDRON BLUE</b> .....1909 Condensation of p-nitroso-phenol with carbazol to $\text{C}_6\text{H}_5\left\{\begin{array}{l} \text{[1]-NH} \\ \text{[1]} \\ \text{[2]-C}_6\text{H}_4[\text{4}]\text{NH} \cdot [\text{1}]\text{C}_6\text{H}_4[\text{4}]\text{OH} \end{array}\right.$ and subsequent fusion with polysulphides. Hydron Blue 48 L 1765 (Kal. 1914). (Current marks, G, R.).. Hydron Blue 48 M 1766..... Hydron Blue 52 R..... Hydron Blue 52 R 1871..... Hydron Blue 52 S 1872..... Indo Carbon 44 M 1666 (Kal. 1911). (Current marks S, SF.)..	C C C C C C	292,729	33,555
748a	<b>HYDRON BROWN</b> ..... Hydron Brown 67 L 2249 (Kal. 1914)..... Hydron Brown 67 M 2250.....	C C	1,600	708
748b	<b>HYDRON OLIVE</b> ..... Hydron Olive 55 G 1936 (S.; Kal. 1914). (Current mark, G.)... Hydron Olive 66 S 2231.....	C C	2,196	624
748c	<b>HYDRON VIOLET 53 X 1902 (S.; Kal. 1913). (Current marks, B, R, WE.)</b> .....	C	99	
748d	<b>HYDRON YELLOW G (S.; Kal. 1913)</b> .....	C	99	
749	<b>ANTHRAQUINONE BLACK</b> .....1896 Fusion with polysulphides of 1,4'-di-o-nitro-anthraquinone, or of the mixed products obtained by the nitration of anthraquinone.	B	0	
750	<b>KRYOGENE BROWN A, G</b> .....1897 1,8-Dinitro-naphthalene is treated first with sodium bisulphite and next with polysulphides. Kryogene Brown A..... Kryogene Brown GX.....	B B	10,313	972
751	<b>KRYOGENE BROWN RBNXX</b> .....1905	B	498	
751a	<b>KRYOGENE BROWN RXX</b> .....	B	1,100	
751b	<b>KRYOGENE RED BROWN GRXX (S.; Kal. 1911)</b> .....	B	51	
752	<b>KRYOGENE DIRECT BLUE G (S.; Kal. 1908)</b> .....1908	B	2,999	
753	<b>KRYOGENE DIRECT BLUE B</b> .....1907 Kryogene Direct Blue B..... Kryogene Direct Blue BNAGX conc..... Kryogene Blue BNO.....	B B B B	6,928	1,464

## XV. SULPHUR COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
754	KRYOGENE DIRECT BLUE 3 B extra.....1908	B	1,190	
754a	KRYOGENE GREEN GX (S.; Kal. 1913).....	B	2,855	
754b	KRYOGENE VIOLET 3 RX (S. 1910).....	B	000	
755	KRYOGENE BLACK BNX.....1901	B	0	
756	KRYOGENE BLACK TGO.....1904	B	0	
757	SULPHOGENE BROWN G, D.....	I	0	

## XVa. UNCLASSIFIED SULPHUR COLORS.

The following dyes include those sulphur colors currently imported and used in the United States, concerning the manufacture of which no details have yet been published. The many varieties of sulphur blacks falling in this category have already been enumerated in a special section following No. 720. What has been stated regarding the arrangement of unclassified azo colors in the section introduced after No. 402, page 110, holds good for the following section. It includes 203 dyes, falling under 97 headings.

81	SULPHUR BLACK BROWN.....	A	396	353
82	Sulphur Black Brown N extra conc. 55 : 100.....	A		
	Sulphur Black Brown NR extra conc. 70 : 100.....	A		
83	SULPHUR BLUE.....	A	72,434	15,489
83	Sulphur Blue B extra (S.; Kal. 1911).....1906	A		
84	Sulphur Blue B extra conc. 50 : 100.....	A		
84	Sulphur Blue D conc. (S.; Kal. 1911).....	A		
85	Sulphur Blue D extra conc. (S.; Kal. 1911).....	A		
86	Sulphur Blue I extra.....	A		
86	Sulphur Blue I extra conc. 60 : 100.....	A		
87	Sulphur Blue PR (S.; Kal. 1913).....	A		
88	Sulphur Blue R extra (S.; Kal. 1911).....	A		
88	Sulphur Blue R extra conc. 50 : 100.....	A		
89	Sulphur Blue 2 R extra (S.; Kal. 1911).....	A		
810	Sulphur Blue 4 R extra.....	A		
811	SULPHUR BRILLIANT GREEN GK.....	A	198	
	SULPHUR BROWN.....	A	79,631	9,506
812	Sulphur Brown CL 4 R.....	A		
813	Sulphur Brown G (S.; Kal. 1903).....	A		
814	Sulphur Brown 2 G (S.; Kal. 1903).....	A		
815	Sulphur Brown 6 G extra (S.; Kal. 1906).....	A		
816	Sulphur Brown O extra (S.; Kal. 1910).....	A		
817	Sulphur Brown OB extra (S.; Kal. 1910).....	A		
	SULPHUR CATECHU.....	A	68,973	5,671
818	Sulphur Catechu G (S.; Kal. 1904).....	A		
819	Sulphur Catechu R (S.; Kal. 1904).....	A		
	SULPHUR CORINTH.....	A	1,196	254
820	Sulphur Corinth B (S.; Kal. 1904).....	A		
821	Sulphur Corinth CLB.....	A		
	SULPHUR GREEN.....	A	9,157	1,972
822	Sulphur Green 2 BK.....	A		
823	Sulphur Green 4 BK.....	A		
824	Sulphur Green G extra (S.; Kal. 1906).....	A		
825	Sulphur Green 4 GK.....	A		
	SULPHUR INDIGO.....	A	10,483	2,685
826	Sulphur Indigo BA extra (S.; Kal. 1905).....	A		
827	Sulphur Indigo BA extra 50 : 100.....	A		
828	Sulphur Indigo CL extra.....	A		
829	Sulphur Indigo CLGG extra.....	A		
830	SULPHUR OLIVE B extra (S.; Kal. 1910).....	A	399	
	SULPHUR RED BROWN.....	A	3,790	616
831	Sulphur Red Brown 2 RK.....	A		
832	Sulphur Red Brown 6 RK.....	A		
	SULPHUR VIOLET.....	A	1,799	254
833	Sulphur Violet R extra.....	A		
834	Sulphur Violet Y 3 R.....	A		

## XVa. UNCLASSIFIED SULPHUR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>SULPHUR YELLOW</b> .....		4,217	\$357
S35	Sulphur Yellow G extra (S.; Kal. 1908).....	A		
S36	Sulphur Yellow 4 G (S.; Kal. 1910).....	A		
S37	Sulphur Yellow I.....	A		
S38	Sulphur Yellow R extra (S.; Kal. 1906).....	A		
	<b>KATIGENE BLACK BROWN</b> .....		11,006	1,236
S39	Katigene Black Brown BW extra conc. (S.; Kal. 1907).....1905	By		
S40	Katigene Black Brown GN extra conc. (S.; Kal. 1907).....1905	By		
S41	Katigene Black Brown R extra conc. ....	By		
S43	KATIGENE BRILLIANT GREEN 3 G (Kal. 1912).....1910	By	1,590	
	<b>KATIGENE BROWN</b> .....		22,811	2,452
S45	Katigene Brown 2 R (Kal. 1905).....1903	By		
S46	Katigene Brown V (S.).....1905	By		
S47	KATIGENE CHROME BLUE 5 G (S.).....	By	1,407	
S48	KATIGENE CUTCH B (S.; Kal. 1908).....1906	By	7,699	
	<b>KATIGENE DIRECT BLUE</b> .....		11,299	2,305
S49	Katigene Direct Blue B extra conc. (Kal. 1914).....	By		
S50	Katigene Direct Blue RF extra conc. (Kal. 1911).....1910	By		
	<b>KATIGENE INDIGO</b> .....		42,157	5,924
S51	Katigene Indigo extra conc. ....	By		
S52	Katigene Indigo B extra (S. 1901).....	By		
S53	Katigene Indigo G extra (S.; Kal. 1907).....	By		
S54	Katigene Indigo-3 GT extra conc. ....	By		
S55	KATIGENE KHAKI G extra (Kal. 1905).....1904	By	14,242	
S56	KATIGENE OLIVE GN (S. 1901).....	By	1,299	
S57	KATIGENE OLIVE BROWN R.....	By	498	
	<b>KATIGENE RED BROWN</b> .....		68,864	9,396
S58	Katigene Red Brown R.....1909	By		
S59	Katigene Red Brown 3 R (S.; Kal. 1908).....	By		
	<b>KATIGENE VIOLET</b> .....		2,638	1,178
S60	Katigene Violet B (Kal. 1907).....1905	By		
S61	Katigene Violet 3 R (Kal. 1911).....	By		
	<b>KATIGENE YELLOW</b> .....		55,227	9,318
S62	Katigene Yellow G (S.).....1903	By		
S63	Katigene Yellow GG extra (S.).....1906	By		
S64	Katigene Yellow GR extra (Kal. 1912).....	By		
	<b>KATIGENE YELLOW BROWN</b> .....		36,828	5,617
S65	Katigene Yellow Brown GG (S.).....1902	By		
S66	Katigene Yellow Brown GR (S.; Kal. 1905).....1904	By		
S66	Katigene Yellow Brown GR extra.....	By		
S67	Katigene Yellow Brown 9 R.....	By		
S68	Katigene Yellow Brown RL (S.; Kal. 1912).....	By		
S69	IMMEDIAL BRILLIANT GREEN G (S.; Kal. 1909).....	C	4,799	
	<b>IMMEDIAL CUTCH</b> .....		37,676	7,158
S70	Immedial Cutch 15 N 942 (S.; Kal. 1905, 1913). (Current marks, BG, BGG, G, O, OG, OR, R.).....	C		
S71	Immedial Cutch 37 N 1492.....	C		
S72	Immedial Cutch 15 O 943.....	C		
S73	IMMEDIAL DARK GREEN B (S. 1903).....	C	1,001	
S74	IMMEDIAL DEEP GREEN G (S.; Kal. 1907).....	C	1,299	
	<b>IMMEDIAL DIRECT BLUE</b> .....		73,892	11,145
S75	Immedial Direct Blue 35 C 1432 (S.; Kal. 1905, 1910, 1911). (Current marks, B, BB, 4 B, 5 B, OD, R, 23495.).....	C		
S75	Immedial Direct Blue 35 D 1433.....	C		
S75	Immedial Direct Blue 69 F 2294.....	C		
S75	Immedial Direct Blue 69 K 2298.....	C		
S75	Immedial Direct Blue 12 K 364.....	C		
S75	Immedial Direct Blue 49 V 1800.....	C		

## XVa. UNCLASSIFIED SULPHUR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>IMMEDIATE INDOGENE</b> .....		90,077	\$13,141
876	Immedial Indogene 27 N 1242 (S.; Kal. 1910, 1911). (Current marks, B, BCL, GCL, GGL, RCL.).....	C		
876	Immedial Indogene 47 R 1746.....	C		
877	<b>IMMEDIATE KHAKI 70 A 2314</b> (S.; Kal. 1909). (Current marks, D, G.).....	C	24	
	<b>IMMEDIATE NEW BLUE</b> .....		27,492	10,016
878	Immedial New Blue G conc. (S. 1905).....	C		
878	Immedial New Blue G.....	C		
	<b>IMMEDIATE OLIVE</b> .....		3,396	487
879	Immedial Olive 33 E 1384 (S.; Kal. 1905, 1909). (Current marks, B, 2 G, 3 G.).....	C		
879	Immedial Olive 14 L 915.....	C		
879	Immedial Olive 18 U 1024.....	C		
880	<b>IMMEDIATE PURPLE C</b> .....	C	1,001	
881	<b>IMMEDIATE VIOLET C</b> .....	C	2,380	
	<b>IMMEDIATE YELLOW OLIVE</b> .....		8,292	2,305
882	Immedial Yellow Olive 43 H 1637 (S.; Kal. 1908, 1910). (Current marks, G, 5 G.).....	C		
882	Immedial Yellow Olive 49 Q 1795.....	C		
882	Immedial Yellow Olive 30 W 1326.....	C		
	<b>SULPHUR BLUE</b> .....		9,899	1,622
883	Sulphur Blue BG.....	K		
883	Sulphur Blue CHL.....	K		
883	Sulphur Blue G.....	K		
883	Sulphur Blue U.....	K		
	<b>SULPHUR BROWN</b> .....		12,735	1,926
884	Sulphur Brown (bluish).....	K		
884	Sulphur Brown (reddish).....	K		
	<b>SULPHUR INDIGO BLUE</b> .....		862	502
885	Sulphur Indigo Blue RCL.....	K		
885	Sulphur Indigo Blue 827.....	K		
	<b>THION BROWN</b> .....		18,879	2,824
886	Thion Brown G extra (S.). (Current marks, G, O, R, 3 R, T.).....	K		
886	Thion Brown 2 R.....	K		
886	Thion Brown S extra.....	K		
886	Thion Brown 5201.....	K		
886	Thion Brown 5202.....	K		
886	Thion Brown 5206.....	K		
886	Thion Brown 5209.....	K		
887	<b>THION DARK BLUE BO</b> .....	K	220	
	<b>THION GREEN</b> .....		732	269
888	Thion Green 2 G extra (S.; Kal. 1907).....	K		
889	Thion Green 829 (S.; Kal. 1907, 1910). (Current marks, B, 2 B, 2 G, 4 G, 6 G.).....	K		
	<b>THION NAVY BLUE</b> .....		7,874	1,206
890	Thion Navy Blue 475 (S.; Kal. 1905, 1907, 1909, 1914). (Current marks, B, V, UR, U 2 R, UT.).....	K		
890	Thion Navy Blue 5132.....	K		
890	Thion Navy Blue 5133.....	K		
	<b>THION ORANGE</b> .....		2,557	516
891	Thion Orange 2095 (S.). (Current marks, N, NG.)..... 1903	K		
891	Thion Orange 5042.....	K		
892	<b>THION PURPLE O extra</b> .....	K	123	
893	<b>THION VIOLET V extra</b> (S.; Kal. 1911). (Current marks, B, 3 R.).....	K	265	
	<b>THION YELLOW</b> .....		1,978	379
894	Thion Yellow 2 G 40914 (S.).....	K		
895	Thion Yellow 5 G (S.). (Current marks, G, 2 G, 4 G, GN.).....	K		
896	Thion Yellow 2365.....	K		
896	Thion Yellow 5004.....	K		
896	Thion Yellow 5728 J.....	K		

## XVa. UNCLASSIFIED SULPHUR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>THIOGENE BLUE</b> .....		14,344	\$2,251
S97	Thiogene Blue R (S. 1905).....	M		
S98	Thiogene Blue 2 R (S. 1905).....	M		
S99	Thiogene Blue RL liquid (S. 1905).....	M		
	<b>THIOGENE BROWN</b> .....		97,551	10,461
S100	Thiogene Brown G (S.; Kal. 1905).....	M		
S101	Thiogene Brown GC (S.; Kal. 1905).....	M		
S102	Thiogene Brown GG (S.).....	M		
S103	Thiogene Brown GE (S.; Kal. 1905).....	M		
S104	Thiogene Brown G 2 R (S.; Kal. 1905).....	M		
S105	Thiogene Brown R (S.; Kal. 1905).....	M		
S106	Thiogene Brown S (S.; Kal. 1905).....	M		
	<b>THIOGENE CYANINE</b> .....		6,540	1,269
S107	Thiogene Cyanine B (Kal. 1913).....	M		
S108	Thiogene Cyanine G (S.).....	M		
S109	<b>THIOGENE DARK RED G</b> (S.; Kal. 1907).....	M	500	
	<b>THIOGENE DEEP BLUE</b> .....		12,186	3,049
S110	Thiogene Deep Blue (S.; Kal. 1911).....	M		
S111	Thiogene Deep Blue BR conc. (S.; Kal. 1911).....	M		
	<b>THIOGENE GREEN</b> .....		6,106	1,167
S112	Thiogene Green BL (S.; Kal. 1908).....	M		
S113	Thiogene Green G (S.; Kal. 1908).....	M		
S114	Thiogene Green GG (S.; Kal. 1908).....	M		
S115	Thiogene Green GL (S.; Kal. 1908).....	M		
S116	<b>THIOGENE KHAKI N</b> conc. (S.).....	M	1,520	
S117	<b>THIOGENE NEW BLUE JL</b> (S.; Kal. 1911).....	M	4,737	
S118	<b>THIOGENE OLIVE GREEN GGN</b> (S.; Kal. 1910).....	M	70	
S119	<b>THIOGENE ORANGE R</b> (S.).....	M	1,200	
S120	<b>THIOGENE VIOLET V</b> (S.; Kal. 1908).....	M	3,898	
	<b>THIOGENE YELLOW</b> .....		5,545	975
S121	Thiogene Yellow GG (S.).....	M		
S122	Thiogene Yellow 5 G (S.; Kal. 1911).....	M		
	<b>SULPHUR BLUE</b> .....		1,543	423
S123	Sulphur Blue BE (S.; Kal. 1911).....	1909 BK		
S124	Sulphur Blue RR conc. 200 per cent.....	BK		
	<b>SULPHINE BLUE</b> .....		2,604	549
S125	Sulphine Blue B conc. 200 per cent (S. 1913).....	CG		
S126	Sulphine Blue R.....	CG		
S127	<b>THIOPHOR BLUE B</b> conc. (S.; Kal. 1909).....	CJ	220	
S128	<b>THIOPHOR DARK BROWN B</b> conc. (S.; Kal. 1906, 1909).....	CJ	441	
S129	<b>THIOPHOR DEEP GREEN CG</b> (Kal. 1910).....	CJ	1,323	
S130	<b>THIOPHOR KHAKI</b> .....	CJ	1,565	
S131	<b>THIOPHOR ORANGE O</b> conc. (S.; Kal. 1906, 1909).....	CJ	110	
S132	<b>THIOPHOR YELLOW R</b> conc. (S.; Kal. 1906, 1909).....	CJ	220	
S132a	<b>THIOPHOR YELLOW OLIVE</b> conc. (Kal. 1914).....	CJ	331	
	<b>THIOXINE BROWN</b> .....		2,114	336
S133	Thioxine Brown 5 G (S.; Kal. 1913).....	GrE		
S134	Thioxine Brown 2 GR (Kal. 1914).....	GrE		
	<b>PYROL BROWN</b> .....		2,414	356
S135	Pyrol Brown G extra (S.; Kal. 1911).....	L		
S135	Pyrol Brown (yellowish).....	L		
S136	Pyrol Brown 69181 (S.; Kal. 1911).....	L		
S137	<b>AURONAL BLUE D</b> .....	tM	110	
S138	<b>AURONAL GREEN TA</b> .....	tM	1,574	
	<b>AURONAL ORANGE</b> .....		463	88
S139	Auronal Orange S.....	tM		
S140	Auronal Orange R.....	tM		



## XVa. UNCLASSIFIED SULPHUR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>ECLIPSE BROWN</b> .....		<b>4,333</b>	<b>\$739</b>
8141	Eclipse Brown B (S. 1901). (Made by fusing m-toluylene-dia- mine with polysulphides in the presence of oxalic acid. Ger. Pat. 125586.).....	G		
8142	Eclipse Brown GC (S. 1901).....	G		
8143	Eclipse Brown R.....	G		
	<b>ECLIPSE FAST BROWN</b> .....		<b>4,330</b>	<b>912</b>
8144	Eclipse Fast Brown BC (S. 1908).....	G		
8145	Eclipse Fast Brown GC (S. 1908).....	G		
8146	Eclipse Fast Brown 3 GC (S.).....	G		
8147	Eclipse Fast Brown 4 R (S.; Kal. 1914).....	G		
8148	<b>ECLIPSE FAST DARK BROWN BC</b> .....	G	<b>55</b>	
	<b>ECLIPSE FAST RED BROWN</b> .....		<b>2,125</b>	<b>518</b>
8149	Eclipse Fast Red Brown.....	G		
8149	Eclipse Fast Red Brown conc.....	G		
8150	Eclipse Fast Red Brown E conc. (Kal. 1914).....	G		
	<b>ECLIPSE PHOSPHINE</b> .....		<b>1,069</b>	<b>162</b>
8151	Eclipse Phosphine GGC.....	G		
8152	Eclipse Phosphine RRC (S. 1908).....	G		
	<b>ECLIPSE YELLOW</b> .....		<b>1,909</b>	<b>286</b>
8153	Eclipse Yellow G (S. 1903). (The various marks of Eclipse Yellow (G, 3 G, R) are made from benzidine or m-toluylene- diamine by fusion with polysulphides and monoformyl- or diformyl-m-toluylene-diamine.).....	G		
8154	Eclipse Yellow 3 G 170.....	G		
	<b>PYROGENE BROWN</b> .....		<b>63,450</b>	<b>6,689</b>
8155	Pyrogene Brown D (S.; Kal. 1910) (Cachou de Laval(?)).....	I		
8156	Pyrogene Brown G (S.; Kal. 1905).....	I		
8157	Pyrogene Brown GX (S.; Kal. 1905).....	I		
8158	Pyrogene Brown OR (S.; Kal. 1905).....	I		
8159	Pyrogene Brown ORR (S.; Kal. 1905).....	I		
8160	Pyrogene Brown 4 R extra (S.; Kal. 1905).....	I		
	<b>PYROGENE CUTCH</b> .....		<b>1,999</b>	<b>389</b>
8161	Pyrogene Cutch DR (S.; Kal. 1905, 1910).....	I		
8162	Pyrogene Cutch 2 CO (S. 1905).....	I		
8163	Pyrogene Cutch 2 R extra (S.; Kal. 1905).....	I		
8164	<b>PYROGENE ORANGE R (S.; Kal. 1914)</b> .....	I	<b>421</b>	
8165	<b>SULPHUR BROWN M</b> .....	I	<b>1,731</b>	
8166	<b>SULPHUR YELLOW R conc</b> .....	I	<b>276</b>	
8167	<b>SULPHUR OLIVE</b> .....	S	<b>110</b>	
	<b>SULPHUR BRONZE</b> .....		<b>15,152</b>	<b>1,392</b>
8168	Sulphur Bronze 136.....	Lev		
8169	Sulphur Bronze 158.....	Lev		
	<b>SULPHUR BROWN</b> .....		<b>5,850</b>	<b>370</b>
8170	Sulphur Brown 527.....	Lev		
8171	Sulphur Brown 731.....	Lev		
	<b>SULPHUR GREEN</b> .....		<b>2,871</b>	<b>336</b>
8172	Sulphur Green 309.....	Lev		
8173	Sulphur Green 330.....	Lev		
8174	<b>CROSS DYE BLUE FR conc. 10 per cent.</b> .....	H	<b>100</b>	
	<b>CROSS DYE BROWN</b> .....		<b>1,547</b>	<b>145</b>
8175	Cross Dye Brown 2 D.....	H		
8176	Cross Dye Brown 4 R.....	H		
	<b>CROSS DYE DRAB</b> .....		<b>15,758</b>	<b>1,324</b>
8177	Cross Dye Drab N conc.....	H		
8177	Cross Dye Drab N 35 per cent.....	H		
	<b>CROSS DYE YELLOW</b> .....		<b>2,164</b>	<b>394</b>
8178	Cross Dye Yellow D.....	H		
8179	Cross Dye Yellow R.....	H		
8180	Cross Dye Yellow Y 30 per cent.....	H		
8181	<b>CROSS DYE GREEN G conc</b> .....	H	<b>100</b>	

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
A. SIRIUS YELLOW AND RELATED COLORS.				
758	SIRIUS YELLOW G (for lakes).....1908 Condensation of naphthoyl-benzoic acid by means of concentrated sulphuric acid. Naphthantraquinone: $\text{C}_6\text{H}_4\left\{\begin{array}{c} \text{--OO--} \\ \text{--CO--} \end{array}\right\}\text{C}_6\text{H}_4$	B	0	
759	ANTHRAFLAVONE G paste.....1905 Condensation of 2 molecules of $\beta$ -methyl-anthraquinone. $\text{C}_6\text{H}_4\left\{\begin{array}{c} \text{--CO--} \\ \text{--CO--} \end{array}\right\}\begin{array}{c} \text{[1]} \\ \text{[2]} \end{array}\text{C}_6\text{H}_4\begin{array}{c} \text{[5]} \\ \text{[2]} \end{array}\text{CH--CH}\begin{array}{c} \text{[1]} \\ \text{[2]} \end{array}\text{C}_6\text{H}_4\left\{\begin{array}{c} \text{[1]} \\ \text{[2]} \end{array}\right\}\begin{array}{c} \text{--CO--} \\ \text{--CO--} \end{array}\text{C}_6\text{H}_4$	B	7,143	
760	INDANTHRENE GOLD ORANGE G paste.....1905 Pyranthrene, pyranthrone.—Elimination of 2 molecules of water from 2,2'-dimethyl-1,1'-dianthraquinonyl.	B	30,092	
761	INDANTHRENE GOLD ORANGE R.....1909 Chlorinated pyranthrene. Indanthrene Gold Orange R paste..... Indanthrene Gold Orange RS powder..... Indanthrene Gold Orange 2 RT paste.....	..... B B B	50,496	\$2,052
762	INDANTHRENE SCARLET GS powder.....1909 Dibromo-pyranthrone.	B	99	
763	INDANTHRENE DARK BLUE BO paste.....1906 Violanthrene.—Condensation of 2 molecules of benzanthrone.	B	11,096	
764	INDANTHRENE VIOLETS RT.....1905 Halogen derivatives of No. 763.	B	0	
765	INDANTHRENE GREEN B paste.....1906 Viridanthrene B.—Nitro derivative of No. 763.	B	72,227	
765a	INDANTHRENE BLUE GREEN B paste.....	B	24	
766	INDANTHRENE VIOLET R extra paste.....1908 Isoviolanthrene.—Fusion of halogen derivatives of benzanthrone with caustic alkalies.	B	1,590	
767	INDANTHRENE VIOLET RR.....1909 Dichloro-isoviolanthrene. Indanthrene Violet RR extra powder..... Indanthrene Violet RR extra paste..... Indanthrene Violet RR extra P powder..... Indanthrene Violet RR extra P paste.....	..... B B B B	68,419	\$1,516
768	INDANTHRENE VIOLET B.....1909 Dibromo-isoviolanthrene.	B	0	
768a	INDANTHRENE BLACK..... Chlorination of Indanthrene Green. Indanthrene Black B paste (S.; Kal. 1914; R. 80).....1909 Indanthrene Black BB double paste.....	..... B B	50,034	\$1,576
B. OXYKETONE COLORS AND RELATED COLORS.				
769	ALIZARIN YELLOW C.....1881 Gallacetophenone (trioxyacetophenone).	B	0	
770	ALIZARIN YELLOW A.....1889 Trioxy-benzophenone.	B	0	
771	RESOFLAVIN W.....1895 Oxidation of m-dioxy-benzoic acid.	B	0	
772	GALLOFLAVIN W paste.....1886 Moderate oxidation of gallic acid.	B	838	

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
773	ANTHRACENE YELLOW .....1889 Dibromo-dioxy- $\beta$ -methyl-coumarin. $\begin{array}{c} \text{HO} \begin{array}{ c } \hline 3 \\ \hline \end{array} \\ \text{HO} \begin{array}{ c } \hline 4 \\ \hline \end{array} \\ \text{Br} \begin{array}{ c } \hline 5 \\ \hline \end{array} \\ \text{Br} \begin{array}{ c } \hline 6 \\ \hline \end{array} \end{array} \text{C}_6 \begin{array}{ c } \hline [2] - \text{O} - \text{CO} \\ \hline [1] - \text{C} = \text{CH} \\ \hline \text{CH}_3 \end{array}$ <p>Galloflavin and anthracene yellow are not coal-tar colors by derivation, although falling naturally, by classification, into Group XVI.</p>	By	3,393	
773a	ANTHRACENE YELLOW G.....	I	1,653	
774	ALIZARIN BLACK.....1861 Sodium bisulphite compound of naphthazarin (dioxy-naphthoquinone). $\text{C}_{10}\text{H}_6 \begin{array}{ c } \hline \begin{array}{c} (1) - \text{O} \\ (4) - \text{O} \\ (7) - \text{OH} \\ (8) - \text{OH} \end{array} \\ \hline \end{array} + \text{NaHSO}_3$ <p>Alizarin Black 8 paste..... Alizarin Black 8 powder..... Alizarin Black 8R paste..... Alizarin Black WR paste.....</p>	B B B B	136,461	\$9,936
774a	ALIZARIN BLUE BLACK (V. M.)..... Alizarin Blue Black GT powder..... Alizarin Blue Black B.....	B C	1,560	434
774b	ALIZARIN BLACK (V. M.)..... Alizarin Black B..... Alizarin Black B powder..... Alizarin Black B powder conc..... Alizarin Black 3 B powder..... Alizarin Black 1A..... Alizarin Black 27 B 1231. (Current marks, 4 B, 6 B, 7 B, 4 BS, 7 BS, CR, D, EFF, ES 35, ES 5 B, ES 85, ESN, ESS, JH, 19 J, NBB, OO, RNB, S, S 2 O, SS 2 B, SS 3 B, T, TJ, TN, X 2 B, X 3 B.) Alizarin Black 25 D 1183..... Alizarin Black 4 W 568..... Alizarin Black 8 B..... Alizarin Black AB..... Alizarin Black AB.....	By By By By By C C C AW AW CV	61,187	19,238
774c	ALIZARIN MILLING BLACK 8 B.....	AW	1,545	
774d	ALIZARIN GRAY.....	C	4,696	
775	ALIZARIN DARK GREEN W.....1897 Action of phenols upon naphthazarin.	B	0	
776	PRINTING BLACK, FOR WOOL.....1896 Reduction of a mixture of 1.5- and 1.8-dinitro-naphthalene by means of glucose, in alkaline solution, in presence of sodium sulphite.	B	0	
777	CHROMOGENE I.....1892 Sodium chromotropate. (Sodium salt of 1.8-dioxy-naphthalene-3.6-disulphonic acid.)	M	0	
778	ALIZARIN (synthetic)..... $\alpha$ - $\beta$ -Dioxyanthraquinone. $\text{C}_6\text{H}_4 \begin{array}{ c } \hline \text{(CO)} \\ \hline \end{array} \text{C}_6\text{H}_2 \begin{array}{ c } \hline \begin{array}{c} (1)\text{OH} \\ (2)\text{OH} \end{array} \\ \hline \end{array}$ <p>Alizarin V 1 extra pure (for lakes)..... Alizarin V 1 extra pure 20 per cent (for lakes)..... Alizarin V 2 A blue shade D 20 per cent..... Alizarin V 3 W 20 per cent paste..... Alizarin IB extra (for lakes)..... Alizarin IP..... Alizarin 11 AB..... Alizarin 11 X..... Alizarin D 1140 paste.....</p>	B B B B By By By By By M	208,392	\$9,465

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
778	ALIZARIN—Continued. Alizarin D 1140 paste..... Alizarin D 1390 20 per cent..... Alizarin I paste..... Alizarin IB paste 20 per cent..... Alizarin IT paste 20 per cent..... Alizarin 1140..... Alizarin 744 20 per cent..... Alizarin paste..... Alizarin powder.....	M M M M M M M Br. Aliz. Co. Br. Aliz. Co.		
779	ALIZARIN ORANGE.....1874 $\beta$ -Nitroalizarin. $\text{C}_6\text{H}_4\left\{\begin{smallmatrix} \text{CO} \\ \text{CO} \end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix} (1)\text{OH} \\ (2)\text{OH} \\ (3)\text{NO}_2 \end{smallmatrix}\right\}$ Alizarin Orange A paste 15 per cent..... Alizarin Orange R powder..... Alizarin Orange powder 20 per cent..... Alizarin Orange DG..... Alizarin Orange DN..... Alizarin Orange GR.....	B By M M M M M	14,320	\$3,18
780	ALIZARIN RED.....1871 Sodium salt of alizarin-sulphonic acid. $\text{C}_6\text{H}_4\left\{\begin{smallmatrix} \text{CO} \\ \text{CO} \end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix} (1)\text{OH} \\ (2)\text{OH} \\ (3)\text{SO}_2\text{Na} \end{smallmatrix}\right\}$ Alizarin Red SWB powder..... Alizarin Red SWBB powder..... Alizarin Red SWR powder..... Alizarin Red WB powder..... Alizarin W..... Alizarin W powder..... Alizarin Red IWS..... Alizarin IWS powder..... Alizarin powder.....	B B B B By By M M Q	53,154	24,70
780a	ALIZARIN RED (V. M.)..... Alizarin Red D 4 B conc. 50 per cent red..... Alizarin Red D 4 B conc..... Alizarin Red D 10 B..... Alizarin Red DG..... Alizarin Red G..... Alizarin Red (yellow).....	M M M M M M M	28,775	3,70
781	ERWECO ALIZARIN ACID RED SB.....1903 Sodium salts of alizarin-6-sulphonic acid and alizarin-8-sulphonic acid.	RW & Co.	0	
782	ALIZARIN BROWN.....1877 Trioxo-anthraquinone. $\text{C}_6\text{H}_4\left\{\begin{smallmatrix} \text{CO} \\ \text{CO} \end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix} (1)\text{OH} \\ (2)\text{OH} \\ (3)\text{OH} \end{smallmatrix}\right\}$ Anthracene Brown paste..... Anthracene Brown BW powder..... Alizarin Brown powder..... Alizarin Brown paste 20 per cent..... Alizarin Brown B..... Alizarin Brown D 3 GO..... Alizarin Brown DR..... Alizarin Brown N paste 20 per cent..... Alizarin Brown RR..... Anthracene Brown RH..... Alizarin Brown O.....	B B M M M M M M M H Q	110,211	30,00
782a	ANTHRACENE BROWN (V. M.)..... Anthracene Brown G..... Anthracene Brown R powder..... Anthracene Brown VV.....	By By By	5,375	2,50

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
783	PURPURIN (synthetic).....1874 Trioxo-anthraquinone, -1.2.4.	B	0	
784	ALIZARIN SX, GD.....1873 Isopurpurin. $\text{HO} \begin{Bmatrix} 7 \\ \text{CO} \end{Bmatrix} \text{C}_6\text{H}_3 \begin{Bmatrix} \text{CO} \\ 2 \end{Bmatrix} \text{C}_6\text{H}_3 \begin{Bmatrix} 1 \\ \text{OH} \end{Bmatrix} \begin{Bmatrix} 2 \\ \text{OH} \end{Bmatrix}$	B	0	
784a	ALIZARIN RVT extra P.....	By	9,586	
784b	ALIZARIN S powder.....	By	4,687	
785	ALIZARIN RG, G 1.....1876 Flavopurpurin. $\text{HO} \begin{Bmatrix} 6 \\ \text{CO} \end{Bmatrix} \text{C}_6\text{H}_3 \begin{Bmatrix} \text{CO} \\ 2 \end{Bmatrix} \text{C}_6\text{H}_3 \begin{Bmatrix} 1 \\ \text{OH} \end{Bmatrix} \begin{Bmatrix} 2 \\ \text{OH} \end{Bmatrix}$	B	0	
785a	ALIZARIN (V. M.)..... Alizarin GI 20 per cent..... Alizarin GOX..... Alizarin XGP..... Alizarin XP..... Alizarin SDG 20 per cent.....	B By By By M	48,021	\$5,379
786	ALIZARIN RED 3 WS.....1886 Sodium salt of flavopurpurin-sulphonic acid.	M	0	
787	ALIZARIN BORDEAUX B, BD.....1890 Tetraoxo-anthraquinone, -1.2.5.8.	By	0	
788	ALIZARIN CYANINE B.....1890 Chiefly a penta-oxo-anthraquinone, -1.2.3.5.8.	By	0	
789	ANTHRACENE BLUE WR.....1891 Hexa-oxo-anthraquinone. $\text{HO} \begin{Bmatrix} 8 \\ \text{OH} \end{Bmatrix} \begin{Bmatrix} 7 \\ \text{CO} \end{Bmatrix} \text{C}_6\text{H}_3 \begin{Bmatrix} \text{CO} \\ 2 \end{Bmatrix} \text{C}_6\text{H}_3 \begin{Bmatrix} 1 \\ \text{OH} \end{Bmatrix} \begin{Bmatrix} 2 \\ \text{OH} \end{Bmatrix} \begin{Bmatrix} 3 \\ \text{OH} \end{Bmatrix} \begin{Bmatrix} 4 \\ \text{OH} \end{Bmatrix}$ Anthracene Blue WR powder..... Anthracene Blue WR paste..... Anthracene Blue W 3 R paste.....	B B B	107,778	13,622
790	ACID ALIZARIN BLUE BB, GR.....1891 Sodium salt of hexa-oxo-anthraquinone-disulphonic acid. $\text{HO} \begin{Bmatrix} 8 \\ \text{NaO}_3\text{S} \end{Bmatrix} \begin{Bmatrix} 7 \\ \text{CO} \end{Bmatrix} \text{C}_6\text{H}_3 \begin{Bmatrix} \text{CO} \\ 2 \end{Bmatrix} \text{C}_6\text{H}_3 \begin{Bmatrix} 1 \\ \text{OH} \end{Bmatrix} \begin{Bmatrix} 2 \\ \text{OH} \end{Bmatrix} \begin{Bmatrix} 3 \\ \text{SO}_3\text{Na} \end{Bmatrix} \begin{Bmatrix} 4 \\ \text{OH} \end{Bmatrix}$	M	0	
790a	ANTHRACENE BLUE (V. M.)..... Anthracene Blue SWG powder..... Anthracene Blue SWGD powder..... Anthracene Blue SWGG extra..... Anthracene Blue SWR powder..... Anthracene Blue WN paste.....	B B B B B	22,444	7,174
790b	ANTHRACENE DARK BLUE W paste (S.). (An impure Anthracene Blue.).....	B	4,198	
C. SULPHUR DERIVATIVES OF ANTHRAQUINONE.				
791	INDANTHRENE OLIVE G.....1909 Fusion of anthracene with sulphur.	B	0	
792	CIBANONE ORANGE R.....1908 Fusion of 2-methyl-anthraquinone with sulphur and subsequent treatment with sodium hypochlorite.	I	0	
792a	CIBANONE GREEN G paste (Kal. 1914).....	I	51	
792b	CIBANONE OLIVE..... Cibanone Olive B paste (Kal. 1914)..... Cibanone Olive G paste (Kal. 1914).....	I I	322	137

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
793	CIBANONE BLUE 3 G.....1908 Fusion of methyl-benzanthrone with sulphur.	I	0	
794	CIBANONE BLACK.....1908 Fusion of methyl-benzanthrone with sulphur. Cibanone Black BG paste 10 per cent..... Cibanone Black 2 G powder (Kal. 1914).....	I I	2,808	\$574
795	CIBANONE YELLOW R paste 10 per cent.....1908 A sulphur derivative of anthraquinone.	I	298	
796	ACID ALIZARIN GREEN B, G.....1893 Sodium salt of disulphydro-tetraoxy-anthraquinone-disulphonic acid. $\begin{array}{c} \text{HO} \begin{array}{c} \text{[8]} \\ \text{[7]} \end{array} \\ \text{NaO} \begin{array}{c} \text{[8]} \\ \text{[7]} \end{array} \\ \text{HS} \begin{array}{c} \text{[8]} \\ \text{[7]} \end{array} \end{array} \left\{ \begin{array}{c} \text{C}_6 \begin{array}{c} \text{[1]} \\ \text{[2]} \end{array} \begin{array}{c} \text{CO} \\ \text{CO} \end{array} \text{C}_6 \begin{array}{c} \text{[3]} \\ \text{[4]} \end{array} \begin{array}{c} \text{OH} \\ \text{OH} \end{array} \right\} \begin{array}{c} \text{[1]} \text{SH} \\ \text{[2]} \text{OH} \\ \text{[3]} \text{SO}_2 \text{Na} \\ \text{[4]} \text{OH} \end{array}$	M	0	
796a	ACID ALIZARIN GREEN 3 G (S.; Kal. 1912)..... D. AMIDO-ANTHRAQUINONE AND RELATED COLORS.	I	1,157	
797	ALIZARIN GARNET.....1877 $\alpha$ -Amido-alizarin. $\text{C}_6\text{H}_4 \begin{array}{c} \text{[1]} \text{CO} \\ \text{[2]} \text{CO} \end{array} \text{C}_6\text{H}_3 \begin{array}{c} \text{[1]} \text{OH} \\ \text{[2]} \text{OH} \\ \text{[4]} \text{NH}_2 \end{array}$ Alizarin Garnet R..... Alizarin Garnet.....	M AW	799	131
798	ALIZARIN MAROON W.....1885 Various amido-alizarins ( $\alpha$ -, $\beta$ -, $\gamma$ -), mixed with amido-purpurin.	B	0	
799	ALIZARIN CYANINE G.....1890 Imide of tri- or tetra-oxy-anthraquinone.	By	0	
800	ANTHRACENE BLUE.....1891 Successive action of fuming sulphuric acid and of ordinary sulphuric acid upon 1,5-dinitro-anthraquinone, with or without the presence of a reducing agent (e. g., sulphur). Anthracene Blue WB paste..... Anthracene Blue WG..... Anthracene Blue WG paste.....	B B B	54,712	9,226
800a	ANTHRACENE BLUE 3 G.....	M	100	
801	ANTHRACENE BLUE WGG.....1897 Sodium salt of diamido-dioxy-anthraquinone-sulphonic acid.	B	0	
802	ANTHRACENE BLUE new WG.....1899 Long heating of Anthracene Blue with caustic soda and ammonia in a closed vessel.	B	0	
803	ALIZARIN BLUE WX, A.....1879 Dioxy-anthraquinoline. $\text{C}_6\text{H}_4 \begin{array}{c} \text{[1]} \text{CO} \\ \text{[2]} \text{CO} \end{array} \text{C} \begin{array}{c} \text{[1]} \text{OH} \\ \text{[2]} \text{OH} \\ \text{[3]} \text{—N—CH} \\ \text{[4]} \text{—CH=CH} \end{array}$ Alizarin Blue WX 20 per cent..... Alizarin Blue WX 10 per cent..... Alizarin Blue A paste.....	B B M	16,575	6,453
803a	ALIZARIN BLUE (V. M.)..... Alizarin Blue A powder..... Alizarin Blue AS..... Alizarin Blue BR powder..... Alizarin Blue BR 3 G powder..... Alizarin Blue GWD8..... Alizarin Blue HJ..... Alizarin Blue IIX..... Alizarin Blue JR powder.....	By By By By By By By By	303,219	69,712

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
803a	ALIZARIN BLUE—Continued.			
	Alizarin Blue NFA.....	By		
	Alizarin Blue NHN.....	By		
	Alizarin Blue NS powder.....	By		
	Alizarin Blue NSG powder.....	By		
	Alizarin Blue NSG extra.....	By		
	Alizarin Blue 67 X 2261.....	C		
	Alizarin Blue Y 2262.....	C		
	Alizarin Blue B paste.....	M		
	Alizarin Blue BB.....	M		
	Alizarin Blue DB.....	M		
	Alizarin Blue DH 6 GM.....	M		
	Alizarin Blue DN.....	M		
	Alizarin Blue D 2 R.....	M		
	Alizarin Blue D 4 R.....	M		
	Alizarin Blue GR paste.....	M		
	Alizarin Blue GW powder.....	M		
	Alizarin Blue (violet shade) P.....	S		
	Alizarin Blue (violet shade).....	S		
	Alizarin Blue B paste.....	Q		
803b	ALIZARIN CHROME BLUE T powder.....	S	500	
804	ALIZARIN BLUE S.....1881		79,679	\$69,671
	Sodium bisulphite compound of dioxy-anthra- <i>s</i> -quinoline			
	Alizarin Blue powder.....	By		
	Alizarin Blue BAE powder.....	By		
	Alizarin Blue SAP powder.....	By		
	Alizarin Blue SAWBA powder.....	By		
	Alizarin Blue SRM powder (Kal. 1914).....	M		
	Alizarin Blue SRM paste.....	M		
804a	ALIZARIN BLUE (V. M.).....		12,400	6,158
	Alizarin Blue SB paste.....	M		
	Alizarin Blue SB powder.....	M		
	Alizarin Blue SB powder.....	M		
	Alizarin Blue 942.....	M		
	Alizarin Blue 942 paste.....	M		
804b	ALIZARIN DARK BLUE.....		6,300	3,177
	Alizarin Dark Blue S.....	M		
	Alizarin Dark Blue DR.....	M		
804c	ALIZARIN SKY BLUE B powder.....	By	19,471	
805	ALIZARIN GREEN S.....1892		15,885	2,497
	Bisulphite compound of dioxy-anthra- <i>α</i> -quinoline.			
	$\text{C}_6\text{H}_2(\text{CO})_2\text{C}_6\left\{\begin{array}{l} (1)\text{OH} \\ (2)\text{OH} \\ (3)-\text{CH}-\text{CH} \\ (6)-\text{N}-\text{CH} \end{array}\right. + 2\text{NaHSO}_3$			
	Alizarin Green SG.....	M		
	Alizarin Green S powder.....	M		
	Alizarin Green SW.....	M		
	Alizarin Green WB.....	M		
	Alizarin Green BB.....	M		
	Alizarin Green DGN.....	M		
	Alizarin Green DMA.....	M		
806	ALIZARIN BLACK P.....1892	M	0	
	Flavopurpurin-quinoline.			
	$\text{HO}(6)\text{C}_6\text{H}_2(\text{CO})_2\text{C}_6\left\{\begin{array}{l} (1)\text{OH} \\ (2)\text{OH} \\ (3)-\text{N}-\text{CH} \\ (4)-\text{CH}-\text{CH} \end{array}\right.$			
806a	ALIZARIN BLACK (V. M.).....		229,500	33,275
	Alizarin Black AC.....	M		
	Alizarin Black DCR.....	M		
	Alizarin Black DES.....	M		
	Alizarin Black EN.....	M		
	Alizarin Black ENT conc.....	M		
	Alizarin Black R 15 per cent red.....	M		
	Alizarin Black R 20 per cent red.....	M		
	Alizarin Black R 30 per cent red.....	M		

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
807	ALIZARIN BLACK S.....1892 Bisulphite compound of Alizarin Black P. Alizarin Black SE paste..... Alizarin Black SE powder 15 per cent red..... Alizarin Black SET powder 15 per cent red..... Alizarin Black SET powder..... Alizarin Black SN..... Alizarin Black SNT.....	M M M M M M	198,491	\$19,94
807a	PATENT ALIZARIN BLACK..... Patent Alizarin Black DEB extra conc..... Patent Alizarin Black DFF conc..... Patent Alizarin Black DFFA conc.....	M M M	61,500	10.04
808	ALIZARIN GREEN S paste.....1888 Mixture of the bisulphite compounds of tri- and tetra-oxy- anthraquinone-quinoline and their sulphonic acids.  <i>Chiefly:</i> $\begin{array}{c} \text{HO}\{3\} \\ \text{HO}\{5\} \end{array} \text{C}_6\text{H}_2 \left\{ \begin{array}{l} \text{---CO---} \\ \text{---CO---} \end{array} \right\} \text{C}_6 \left\{ \begin{array}{l} \text{[1]OH} \\ \text{[2]OH} \\ \text{[3]---N---CH} \\ \text{[4]---CH---CH} \end{array} \right.$ +2NaHSO <sub>3</sub>	B	11,096	
808a	ALIZARIN GREEN (V. M.)..... Alizarin Green C..... Alizarin Green CE..... Alizarin Green CG extra powder..... Alizarin Green CK powder..... Alizarin Green SP 4..... Alizarin Green V..... Alizarin Green V conc. 27872..... Alizarin Green VD.....	By By By By By By By By	124,095	58.49
809	ALIZARIN INDIGO BLUE S.....1888 Mixture of the bisulphite compounds of tetra- and penta-oxy- anthraquinone-quinoline and their sulphonic acids.	B	0	
810	HELINDONE YELLOW 3 GN.....1910 2,2'-Dianthraquinonyl-urea. $\begin{array}{c} \text{C}_6\text{H}_2 \left\{ \begin{array}{l} \text{CO} \\ \text{CO} \end{array} \right\} \text{C}_6\text{H}_2 \{3\} \text{NH} \\ \text{CO} \\ \text{C}_6\text{H}_2 \left\{ \begin{array}{l} \text{CO} \\ \text{CO} \end{array} \right\} \text{C}_6\text{H}_2 \{3\} \text{NH} \end{array}$	M	0	
810a	HELINDONE YELLOW (V. M.)..... Helindone Yellow CG paste (S.; Kal. 1913)..... Helindone Yellow CG (vat)..... Helindone Yellow CG powder..... Helindone Yellow RN paste.....1913	M M M M	20,744	6.964
811	ALGOL YELLOW 3 G.....1908 Succinyl-α-amido-anthraquinone. $\begin{array}{c} \text{C}_6\text{H}_2 \left\{ \begin{array}{l} \text{CO} \\ \text{CO} \end{array} \right\} \text{C}_6\text{H}_2 \{1\} \text{NH---CO---CH}_2 \\ \text{C}_6\text{H}_2 \left\{ \begin{array}{l} \text{CO} \\ \text{CO} \end{array} \right\} \text{C}_6\text{H}_2 \{1\} \text{NH---CO---CH}_2 \end{array}$	By	1,598	
811a	ALGOL YELLOW 6 GL lumps (Kal. 1914).....	By	11	
812	INDANTHRENE ORANGE RT paste.....1907 Action of phosphorus oxychloride upon equal molecules of 2-acet-amido-anthraquinone and 1.6- (or 1.7-) diacet-amido- anthraquinone.	B	2,103	
813	INDANTHRENE COPPER R paste.....1907 Action of phosphorus oxychloride upon equal molecules of 1-acet-amido-anthraquinone and 1.6- (or 1.7-) diacet-amido- anthraquinone.	B	1,268	
814	ALGOL YELLOW WF.....1910 Benzoyl-1-amido-anthraquinone. $\text{C}_6\text{H}_2 \left\{ \begin{array}{l} \text{CO} \\ \text{CO} \end{array} \right\} \text{C}_6\text{H}_2 \{1\} \text{NH} \cdot \text{CO} \cdot \text{C}_6\text{H}_5$	By	5,185	



## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
815	ALGOL SCARLET G.....1910 Benzoyl-1-amido-4-methoxy-anthraquinone.	By	0	
816	ALGOL RED 5 G powder.....1910 Dibenzoyl-1,4-diamido-anthraquinone. $\text{C}_6\text{H}_5\left(\frac{\text{CO}}{\text{CO}}\right)\text{C}_6\text{H}_5\left\{\begin{array}{l} [1]\text{NH} \cdot \text{CO} \cdot \text{C}_6\text{H}_5 \\ [4]\text{NH} \cdot \text{CO} \cdot \text{C}_6\text{H}_5 \end{array}\right.$	By	42	
816a	ALGOL RED (V. M.)..... Algol Red 2 G (Kal. 1914)..... Algol Red 3 G.....	By By	1,398	\$341
817	ALGOL YELLOW R.....1909 Dibenzoyl-1,5-diamido-anthraquinone. $\text{C}_6\text{H}_5 \cdot \text{CO} \cdot \text{HN}[1]\text{C}_6\text{H}_5\left(\frac{\text{CO}}{\text{CO}}\right)\text{C}_6\text{H}_5[5]\text{NH} \cdot \text{CO} \cdot \text{C}_6\text{H}_5$	By	4,887	
818	ALGOL PINK R powder.....1910 Benzoyl-4-amido-1-oxy-anthraquinone. $\text{C}_6\text{H}_5\left(\frac{\text{CO}}{\text{CO}}\right)\text{C}_6\text{H}_5\left\{\begin{array}{l} [1]\text{OH} \\ [4]\text{NH} \cdot \text{CO} \cdot \text{C}_6\text{H}_5 \end{array}\right.$	By	126	
819	ALGOL RED R, FF.....1909 Dibenzoyl-1,5-diamido-8-oxy-anthraquinone. $\text{C}_6\text{H}_5 \cdot \text{CO} \cdot \text{HN}\left\{\begin{array}{l} [8] \\ [5] \end{array}\right\}\text{C}_6\text{H}_5\left(\frac{\text{CO}}{\text{CO}}\right)\text{C}_6\text{H}_5[1]\text{NH} \cdot \text{CO} \cdot \text{C}_6\text{H}_5$ Algol Brilliant Red 2 B powder..... Algol Red FF..... Algol Red R extra.....	By By By	2,322	424
820	ALGOL BRILLIANT VIOLET R.....1910 Succinyl-diamido-anthrarufln. (?)	By	12,784	
821	ALGOL BRILLIANT VIOLET 2 B.....1910 Dibenzoyl-diamido-anthrarufln. Algol Brilliant Violet 2 B..... Algol Blue 3 RP (S.).....1910	By By	2,893	1,073
822	ALGOL BRILLIANT ORANGE FR.....1910 Benzoyl-1,2,4-triamido-anthraquinone. (?)	By	6,196	
823	ALGOL VIOLET B.....1910 Benzoyl-1-amido-4,5,8-trioxy-anthraquinone.	By	0	
824	ALGOL ORANGE R.....1908 $\alpha$ - $\beta$ -Dianthraquinonyl-amine. $\text{C}_6\text{H}_5\left(\frac{\text{CO}}{\text{CO}}\right)\text{C}_6\text{H}_5[1]\text{NH}[2]\text{C}_6\text{H}_5\left(\frac{\text{CO}}{\text{CO}}\right)\text{C}_6\text{H}_5$	By	51	
825	ALGOL RED B.....1907 $\beta$ -Anthraquinone- $\alpha$ -anthra-N-methyl-pyridone-amine. $\begin{array}{c} \text{C}_6\text{H}_5\left(\frac{\text{CO}}{\text{CO}}\right)\text{C}_6\text{H}_5 \\   \\ [2] \\ \text{NH} \\   \\ [1] \\ \text{C}_6\text{H}_5\left(\frac{\text{O}}{\text{C}}\right)\text{C}_6\text{H}_5 \\   \\ [4] \\ \text{CH} \\   \\ \text{CH}_2 \cdot \text{N} - \text{C} = \text{O} \end{array}$	By	2,399	
826	INDANTHRENE RED G.....1907 Di- $\alpha$ -anthraquinonyl-2,6-diamido-anthraquinone.	B	0	
827	INDANTHRENE CLARET B extra paste.....1906 Dichlor-di- $\alpha$ -anthraquinonyl-2,7-diamido-anthraquinone. $\begin{array}{ccccc} \text{C}_6\text{H}_5\left(\frac{\text{CO}}{\text{CO}}\right)\text{C}_6\text{H}_5[4]\text{NH} & & \text{HN}[3]\text{C}_6\text{H}_5\left(\frac{\text{CO}}{\text{CO}}\right)\text{C}_6\text{H}_5 & & \\ [7] & & [2] & & \\   & &   & & \\ \text{Cl} & & \text{C}_6\text{H}_5\left(\frac{\text{CO}}{\text{CO}}\right)\text{C}_6\text{H}_5 & & \text{Cl} \end{array}$	B	28,728	

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
828	INDANTHRENE CLARET B.....1906 Di-β-anthraquinonyl-1,5-diamido-anthraquinone.	B	0	
829	ALGOL BORDEAUX 3 B.....1909 4,4'-Dimethoxy-di-α-anthraquinonyl-2,6-diamido-anthraqui- none.	By	0	
830	INDANTHRENE RED R paste.....1907 Di-α-anthraquinonyl-2,7-diamido-anthraquinone. $\text{C}_6\text{H}_4\left\{\begin{smallmatrix}\text{CO} \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}[1]\text{NH}[2] \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}\text{CO} \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}[7]\text{NH} \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_4$	B	2,099	
831	INDANTHRENE RED BN extra paste.....1911 Anthraquinone-naphthacridone. $\text{C}_6\text{H}_4\left\{\begin{smallmatrix}\text{CO} \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}[1]\text{NH}[2] \\ \text{CO}\end{smallmatrix}\right\}\text{C}_{10}\text{H}_5$	B	6,056	
832	INDANTHRENE VIOLET RN.....1910 Anthraquinone-di-acridone. $\text{C}_6\text{H}_4\left\{\begin{smallmatrix}[1]\text{CO}[2] \\ [2]\text{NH}[1]\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}\text{CO} \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}[5]\text{NH}[2] \\ [6]\text{CO}[1]\end{smallmatrix}\right\}\text{C}_6\text{H}_4$ Indanthrene Violet RN powder..... Indanthrene Violet RN extra paste.....	B B	11,667	\$5,151
833	ALGOL OLIVE R.....1910 Action of chloro-sulphonic acid upon dibenzoyl-p-p-diamido- α-α'-dianthraquinone-imide.	By	13,334	
834	ALGOL GRAY.....1909 Action of reducing agents, such as sodium sulphide, upon ni- trated αα-anthrimide. Algol Gray B..... Algol Gray BB.....	By By	4,192	1,054
835	HELINDONE ORANGE GRN.....1912 Condensation of pure anthraquinonyl-urea chloride.	M	0	
836	HELINDONE BROWN 3 GN.....1910 Action of anthraquinone-carbamic chloride upon a mixture of various diamido-anthraquinones.	M	0	
837	INDANTHRENE BLUE R.....1901 N-Dihydro-1,2-1',2'-anthraquinone-azine. $\text{C}_6\text{H}_4\left\{\begin{smallmatrix}\text{CO} \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}[2]-\text{NH}-[1] \\ [1]-\text{NH}-[2]\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}\text{CO} \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_4$	B	0	
837a	INDANTHRENE FAST BLUE RR.....	B	500	
838	INDANTHRENE BLUE RS.....1901 Reduction of Indanthrene Blue R (No. 837). $\text{C}_6\text{H}_4\left\{\begin{smallmatrix}\text{CO} \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}[2]-\text{NH}-[1] \\ [1]-\text{NH}-[2]\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}\text{C} \\ \text{C} \\ \text{C}\end{smallmatrix}\right\}\text{C}_6\text{H}_4$ Indanthrene Blue RS..... Indanthrene Blue RS (for paper) paste..... Indanthrene Blue RS (for paper) powder..... Indanthrene Blue RS (for paper) powder triple.....	B B B B	187,379	54,532
839	ALGOL BLUE K.....1904 N-Dimethyl-indanthrene. $\text{C}_6\text{H}_4\left\{\begin{smallmatrix}\text{CO} \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}[2]-\text{N}-[1] \\ [1]-\text{N}-[2]\end{smallmatrix}\right\}\text{C}_6\text{H}_3\left\{\begin{smallmatrix}\text{CO} \\ \text{CO}\end{smallmatrix}\right\}\text{C}_6\text{H}_4$	By	150	

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
840	INDANTHRENE BLUE 3 G.....1910 Oxy-indanthrone. (?) Treatment of indanthrene with boric and sulphuric acids. Indanthrene Blue 3 G paste.....B Indanthrene Blue 3 GP powder.....B		6,120	\$1,938
841	INDANTHRENE BLUE GGS.....1908 Indanthrene Blue GGS.....B Indanthrene Blue GGS (for paper) powder.....B Indanthrene Blue GGBL 23113 powder.....B		10,163	4,284
842	INDANTHRENE BLUE GCD paste.....1903 Dichloro-indanthrene.....B		473,983	
843	INDANTHRENE BLUE GC paste.....1902 Dibromo-indanthrene.....B		1,499	
844	ALGOL BLUE 3 G.....1905 4,4'-Dioxy-indanthrene. $\text{C}_6\text{H}_4\left\{\begin{smallmatrix} \text{CO} \\ \text{CO} \end{smallmatrix}\right\}\text{C}_6\text{H}_2\left\{\begin{smallmatrix} [4]\text{OHHO}[4] \\ [2]-\text{NH}-[1] \\ [1]-\text{NH}-[2] \end{smallmatrix}\right\}\text{C}_6\text{H}_2\left\{\begin{smallmatrix} \text{CO} \\ \text{CO} \end{smallmatrix}\right\}\text{C}_6\text{H}_4$	By	5,904	
844a	ALGOL BLUE G.....	By	3,197	
845	INDANTHRENE MAROON R.....1904 Diamido-anthraquinones are treated with formaldehyde, and the product is fused with caustic potash.	B	0	
846	INDANTHRENE DARK BLUE BT.....1905 Fusion with caustic alkalis of benzanthrone-quinoline.	B	0	
847	ALGOL GREEN B.....1904 Derived from 2,3-dibromo-1,4-diamido-anthraquinone.	By	0	
847a	ALGOL DARK GREEN B (S.; 1908).....	By	2,796	
848	INDANTHRENE GRAY BP powder.....1904 Fusion with caustic potash of diamido-anthraquinones, and of their sulphonic acids.	B	461	
849	INDANTHRENE YELLOW.....1901 Flavanthrene. Obtained by fusing $\beta$ -amido-anthraquinone with caustic potash. $\text{C}_6\text{H}_4-\left\{\begin{smallmatrix} \text{CO} \\ \text{C} \end{smallmatrix}\right\}-\text{C}_6\text{H}_2$ $\begin{array}{c} [1] \quad [2] \\    \quad   \\ [1] \quad \text{N} \\   \quad   \\ \text{N}-\text{C}_6\text{H}_2\left\{\begin{smallmatrix} \text{C} \\ \text{CO} \end{smallmatrix}\right\}\text{C}_6\text{H}_4 \end{array}$		12,683	4,353
	Indanthrene Yellow G paste.....B Indanthrene Yellow GP powder.....B			
849a	INDANTHRENE VIOLET YELLOW..... Indanthrene Violet Yellow G paste.....B Indanthrene Violet Yellow F paste.....B		62,500	20,738
850	INDANTHRENE BLUE WB.....	B	1,290	
850a	INDANTHRENE BLUE WR paste.....	B	21,658	
851	ALIZARIN DIRECT BLUE B.....1903 Mixture of derivatives from 1,8-amido-anthraquinone-sul- phonic acid. Typical component: $\text{NaO}_2\left\{\begin{smallmatrix} [3] \\ [3] \end{smallmatrix}\right\}\text{C}_6\text{H}_2\left\{\begin{smallmatrix} \text{CO} \\ \text{CO} \end{smallmatrix}\right\}\text{C}_6\text{H}_2\left\{\begin{smallmatrix} [1]\text{NH} \cdot \text{C}_6\text{H}_5 \\ [3]\text{Br} \\ [4]\text{NH}_2 \end{smallmatrix}\right\}$	M	0	
851a	ALIZARIN DIRECT BLUE (V. M.)..... Alizarin Direct Blue EB (S.; Kal. 1910; R. 57).....M Alizarin Direct Blue ESB.....M Alizarin Direct Blue ESR.....M Alizarin Direct Blue ESR conc.....M		10,201	11,878

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
852	ALIZARIN IRISOL D, R.....1903 Action of p-toluidine upon quinizarin, and subsequent sulphonation.		0	
853	ANTHRAQUINONE VIOLET powder.....1898 Action of p-toluidine upon 1.5-dinitro-anthraquinone, and subsequent sulphonation. $\text{NH} \cdot \text{C}_6\text{H}_3 \left\{ \begin{array}{l} \text{CH}_3 \\ \text{SO}_2\text{Na} \end{array} \right.$ $\text{C}_6\text{H}_3 \left\{ \begin{array}{l} \text{CO} \\ \text{CO} \end{array} \right\} \text{C}_6\text{H}_3$ $\left[ \begin{array}{l} 1 \\ 5 \end{array} \right]$ $\text{NH} \cdot \text{C}_6\text{H}_3 \left\{ \begin{array}{l} \text{CH}_3 \\ \text{SO}_2\text{Na} \end{array} \right.$	B	1,202	
854	ALIZARIN VIRIDINE DG, FF.....1894 Action of p-toluidine upon 1.2.5.8-tetraoxy-anthraquinone (Alizarin Bordeaux, No. 787), and subsequent sulphonation.	By	0	
855	ALIZARIN PURE BLUE B.....1904 Action of p-toluidine upon dibromo- $\alpha$ -amido-anthraquinone, and subsequent sulphonation.	By	0	
856	ALIZARIN ASTROL..... $\text{C}_6\text{H}_3 \left\{ \begin{array}{l} \text{CO} \\ \text{CO} \end{array} \right\} \text{C}_6\text{H}_3 \left\{ \begin{array}{l} [1]\text{NH} \cdot \text{CH}_3 \\ [4]\text{NH} \cdot \text{C}_6\text{H}_3 \left\{ \begin{array}{l} \text{CH}_3 \\ \text{SO}_2\text{Na} \end{array} \right\} \end{array} \right.$	By	0	
856a	ALIZARIN RUBINOL..... Alizarin Rubinol 5 G (S.; Kal. 1912)..... Alizarin Rubinol R powder (S. 1907).....	By By	10,917	\$11,526
857	ERWECO ALIZARIN ACID BLUE R.....1908 Disulpho-dianilido-anthraquinone acid.	RWCo	0	
858	ALIZARIN SAPHIROL B.....1897 Sodium salt of diamido-anthraquinone-disulphonic acid.	By	0	
859	CYANANTHROL R.....1902 Derived from methyl-anthraquinone. Cyananthrol R powder..... Cyananthrol RB..... Cyananthrol RXO.....	B B B B	18,792	27,555
860	CYANANTHROL G.....1904 Derived from methyl-anthraquinone.	B	0	
861	ANTHRAQUINONE BLUE SR.....1898 Action of aniline, or its homologues, upon tetrabromo-diamido-anthraquinone, and subsequent sulphonation.	B	0	
862	ALIZARIN BLUE BLACK.....1895 Sulphonation of the condensation product of aniline and purpurin. Alizarin Blue Black 3 B..... Alizarin Blue Black B (S.; Kal. 1911)..... Alizarin Blue Black 3 B powder..... Alizarin Blue Black B powder..... Alizarin Blue Black B powder.....	By M M CV Q	54,706	61,370
863	ANTHRAQUINONE BLUE GREEN.....1908 Anthraquinone Blue Green BXO powder..... Anthraquinone Blue Green BXO paste.....	B B	6,552	5,525
864	ANTHRAQUINONE GREEN GXNO powder.....1908	B	1,700	
865	ALIZARIN DIRECT GREEN G.....1894 Action of leuco-quinizarin upon 4-toluidine-2-sulphonic acid. $\text{C}_6\text{H}_3 \left\{ \begin{array}{l} \text{CO} \\ \text{CO} \end{array} \right\} \text{C}_6\text{H}_3 \left\{ \begin{array}{l} [1]\text{NH} - [4]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} [1]\text{CH}_3 \\ [2]\text{SO}_2\text{H} \end{array} \right\} \\ [4]\text{NH} - [4]\text{C}_6\text{H}_3 \left\{ \begin{array}{l} [1]\text{CH}_3 \\ [2]\text{SO}_2\text{H} \end{array} \right\} \end{array} \right.$	M	2,000	
866	LEUCO DARK GREEN B.....1907 Action of aluminum upon a solution in sulphuric acid of 1-methyl-amido-anthraquinone.	By	0	

## XVI. ANTHRAQUINONE AND ALLIED COLORING MATTERS—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
867	INDANTHRENE BROWN.....1907 Action of copper on the solution of 2-amido-anthraquinone in sulphuric acid. Indanthrene Brown B double paste..... Indanthrene Brown paste (S. 1912).....	..... B B	6,175	\$1,304
868	CIBANONE BROWN V paste.....1909 Fusion with sulphur of 1-amido-2-methyl-anthraquinone.	I	399	
869	ALGOL BROWN B.....1910	By	0	
869a	ALGOL BROWN R (S. 1913).....	By	1,596	
870	ALGOL CORINTH R.....1910	By	0	
872	LEUCOL BROWN B.....1907 Sulphonation of anthranol.	By	0	
873	HELINDONE BROWN AN.....1908 Fusion with caustic potash of $\alpha$ - $\alpha$ -dianthraquinonyl-1,4-di-amido-anthraquinone.	M	0	
873a	INDANTHRENE NN.....	B	450	
873b	INDANTHRENE PINK B.....	B	608	
873c	INDANTHRENE RED BROWN R paste.....	B	99	
873d	INDANTHRENE RED VIOLET RRN (S.; Kal. 1913).....	B	1,680	

## XVII. INDIGO AND ITS DERIVATIVES.

874	INDIGO, SYNTHETIC.....1894 Indigotin. $\text{C}_6\text{H}_4\left\{\begin{array}{c} \text{—NH—} \\ \text{—CO—} \end{array}\right\}\text{C}=\text{C}\left\{\begin{array}{c} \text{—NH—} \\ \text{—CO—} \end{array}\right\}\text{C}_6\text{H}_4$ Indigo Synthetic..... Indigo FBP paste..... Indigo 7 G paste..... Indigo NC paste..... Indigo Blue N..... Indigo Synthetic MLB..... Indigo MLB powder..... Indigo solution..... Indigo paste..... Indigo paste..... Indigo Blue 275..... Indigo powder.....	..... B By By By C M M M M I I CJ Q	8,507,359	\$1,090,772
875	INDIGO SALT T.....1892 o-Nitro-phenyl-lactic-methyl-ketone.	K	0	
876	INDIGO WHITE BASE.....1805 Leucindigotin. $\text{C}_6\text{H}_4\left\{\begin{array}{c} \text{[1]NH—} \\ \text{[2]CO—} \end{array}\right\}\text{CH} \cdot \text{CH}\left\{\begin{array}{c} \text{—NH[1]—} \\ \text{—CO[2]—} \end{array}\right\}\text{C}_6\text{H}_4$	B	0	
877	INDIGO EXTRACT.....1740 Sodium salt of indigotin-disulphonic acid, or the free acid. $\text{C}_6\text{H}_3(\text{SO}_2\text{Na})\left\{\begin{array}{c} \text{—NH—} \\ \text{—CO—} \end{array}\right\}\text{C}=\text{C}\left\{\begin{array}{c} \text{—NH—} \\ \text{—CO—} \end{array}\right\}\text{C}_6\text{H}_3(\text{SO}_2\text{Na})$ Indigotin 500..... Indigo Extract A..... Indigo Extract AN 4..... Indigotin I..... Indigotin..... Indigotin.....	..... A B B B WD I	19,322	6,977
878	INDIGOTIN P..... Sodium salt of indigotin-tetrasulphonic acid.	B	0	

## XVII. INDIGO AND ITS DERIVATIVES—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
879	INDIGO MLB.....1903 Mixtures of indigo-5-bromo-indigo and 5.5'-dibromo-indigo. Indigo MLB R..... Indigo MLB R paste.....	M M	53,610	\$11,604
880	INDIGO RB.....1907 5.5'-Dibromo-indigo, with varying amounts of 5.7.5'-tribromo- indigo and 5.7.5.7'-tetrabromo indigo. Indigo RB pure..... Indigo MLB 2 B..... Ciba Blue B powder.....	B M I	6,854	2,314
881	CIBA BLUE 2 B.....1907 5.7.5.7'-Tetrabromo-indigo.  $\text{C}_6\text{H}_3\text{Br}_2\left\{\begin{smallmatrix} \text{NH} \\ \text{CO} \end{smallmatrix}\right\}\text{C}=\text{C}\left\{\begin{smallmatrix} \text{NH} \\ \text{CO} \end{smallmatrix}\right\}\text{C}_6\text{H}_3\text{Br}_2$ Ciba Blue 2 B powder..... Ciba Blue 2 B paste 51 per cent..... Ciba Blue 2 BD paste 16 per cent.....	I I I	16,890	7,423
882	CIBA BLUE G.....1909 Mixtures of 5.7.5.7'-tetrabromo-indigo and 4.5.7.5.7'-penta- bromo-indigo. Ciba Blue G powder..... Ciba Blue G 50 per cent..... Ciba Blue G 2 B powder.....	I I I	1,356	1,608
883	INDIGO KG.....1909 4.5.7.4.5.7'-Hexabromo-indigo is the chief component. Indigo KG paste..... Indigo KG powder..... Indigo in paste..... Indigo MLB 6 B powder..... Indigo MLB 6 B.....	K K K M M	3,191	2,973
884	BRILLIANT INDIGO BBD paste.....1910 5.7.5.7'-Dichloro-dibromo-indigo.	B	4,518	
885	BRILLIANT INDIGO BD paste.....1910 5.7.5.7'-Tetrachloro-indigo.  $\text{C}_6\text{H}_2\text{Cl}_2\left\{\begin{smallmatrix} \text{CO} \\ \text{NH} \end{smallmatrix}\right\}\text{C}=\text{C}\left\{\begin{smallmatrix} \text{CO} \\ \text{NH} \end{smallmatrix}\right\}\text{C}_6\text{H}_2\text{Cl}_2$	B	8,175	
886	BRILLIANT INDIGO GD.....1910 4.5.4.5'-Tetrahalogen-indigo mixed with 5.7.5.7'-tetrahalogen- indigo. Brilliant Indigo GD paste..... Brilliant Indigo 4 GD paste.....	B B	12,057	1,747
887	BRILLIANT INDIGO 4 G.....1910 4.5.4.5'-Dichloro-dibromo-indigo.	B	0	
888	INDIGO MLB T.....1898 7.7'-Dimethyl-indigo.  $\text{C}_6\text{H}_5\left\{\begin{smallmatrix} [1]\text{CH}_3 \\ [2]-\text{NH} \\ [3]-\text{CO} \end{smallmatrix}\right\}\text{C}=\text{C}\left\{\begin{smallmatrix} \text{H}_2\text{C}[1] \\ \text{NH}-[2] \\ \text{CO}-[3] \end{smallmatrix}\right\}\text{C}_6\text{H}_5$ Dimethyl-indigo..... Indigo G paste.....	M B	10,720	1,586
889	INDIGO YELLOW 3 G.....1910 Action of benzoylchloride upon indigo.  $\text{C}_6\text{H}_5\left\{\begin{smallmatrix} \text{CO} \\ \text{N} \end{smallmatrix}\right\}\text{C}=\text{C}\left\{\begin{smallmatrix} \text{CO} \\ \text{N} \end{smallmatrix}\right\}\text{C}_6\text{H}_5$ $\begin{array}{c} \text{C} \\ \text{H} \end{array} \text{C}_6\text{H}_5$	I	0	
890	CIBA YELLOW G powder.....1911 Brominated Indigo Yellow 3 G (No. 889).	I	48	

## XVII. INDIGO AND ITS DERIVATIVES—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
891	CIBA GREEN.....1908 Dibromo-bis- $\beta$ -naphthindole-indigo. $\text{C}_{10}\text{H}_7\text{Br}\left\{\begin{smallmatrix}\text{CO} \\ \text{NH}\end{smallmatrix}\right\}\text{C}=\text{C}\left\{\begin{smallmatrix}\text{CO} \\ \text{NH}\end{smallmatrix}\right\}\text{C}_{10}\text{H}_7\text{Br}$ Ciba Green G paste..... Ciba Green G powder.....	I I	119	\$178
892	HELINDONE GREEN G.....1909 Brominated bis- $\beta$ -naphthindole-indigo.	M	0	
893	ALIZARIN INDIGO G.....1909 2-Anthracene-2-indole-dibromo-indigo. $\text{C}_{14}\text{H}_9\left\{\begin{smallmatrix}\text{O} \\ \text{C} \\ \text{NH}\end{smallmatrix}\right\}\left\{\begin{smallmatrix}\text{CO} \\ \text{NH}\end{smallmatrix}\right\}\text{C}_6\text{H}_4\text{Br}_2$	By	0	
894	ALIZARIN INDIGO B.....1911	By	0	
894a	ALIZARIN INDIGO GREEN B.....	By	201	
894b	ALIZARIN INDIGO VIOLET B.....	By	201	
895	ALIZARIN INDIGO 3 R.....1910	By	0	
896	HELINDONE BLUE 3 GN.....1913 Condensation of oxy-anthranol with isatin-anilide.	M	0	
896a	HELINDONE BLUE 3 R paste.....	M	622	
897	CIBA HELIOTROPE B.....1907 Tetrabromo-indirubin.	I	0	
898	HELINDONE VIOLET D.....1910 Brominated 7-methyl-indirubin.	M	0	
899	CIBA GRAY.....1910 Monobromo-2-thio-naphthene-2-indole-indigo. $\text{C}_6\text{H}_4\left\{\begin{smallmatrix}\text{CO} \\ \text{S}\end{smallmatrix}\right\}\text{C}=\text{C}\left\{\begin{smallmatrix}\text{CO} \\ \text{NH}\end{smallmatrix}\right\}\text{C}_6\text{H}_4\text{Br}$ Ciba Gray B powder..... Ciba Gray B 20 per cent paste..... Ciba Gray G powder..... Ciba Gray G 20 per cent paste.....	I I I I	675	483
900	CIBA VIOLET 3 B.....1906 Dibromo-2-thio-naphthene-2-indole-indigo. Thio Indigo Violet K (S.)..... Ciba Violet 3 B powder..... Ciba Violet 3 B paste.....	I I I I	2,667	820
901	CIBA VIOLET B.....1906 Tribromo-2-thio-naphthene-2-indole-indigo. $\text{C}_6\text{H}_4\text{Br}\left\{\begin{smallmatrix}\text{CO} \\ \text{S}\end{smallmatrix}\right\}\text{C}=\text{C}\left\{\begin{smallmatrix}\text{CO} \\ \text{NH}\end{smallmatrix}\right\}\text{C}_6\text{H}_4\text{Br}_2$ Ciba Violet B paste 10 per cent..... Ciba Violet B paste 50 per cent.....	I I	19,830	6,975
901a	CIBA VIOLET R paste 10 per cent.....	I	1,006	
902	HELINDONE BROWN 2 R.....1910 Thio-indigo brown [K]. Thio Indigo Brown 2 R powder..... Helindone Brown 2 R paste..... Helindone Brown 2 R powder.....	K M M	376	1,480
903	HELINDONE BROWN 5 R.....1910 Bromo-6-amido-2-thio-naphthene-2-indole-indigo.	M	0	

## XVII. INDIGO AND ITS DERIVATIVES—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
904	<b>HELINDONE BROWN G</b> .....1910 Tribromo-6-amido-2-thio-naphthene-3-indole-indigo. Thio Indigo Brown G powder (S.)..... Helindone Brown G paste..... Helindone Brown G powder.....	K M M	12,888	\$6,710
904a	<b>HELINDONE BROWN (V. M.)</b> ..... Helindone Brown powder..... Helindone Brown CR powder (S.; Kal. 1913).....	M M	150	445
905	<b>THIO INDIGO SCARLET R</b> .....1906 2-Thio-naphthene-3-indole-indigo.	K	0	
906	<b>THIO INDIGO SCARLET G</b> .....1906 Dibromo-2-thio-naphthene-3-indole-indigo.	K	0	
907	<b>CIBA SCARLET</b> .....1908 2-Thio-naphthene-acenaphthene-indigo.  $\text{C}_6\text{H}_4\left\{\begin{smallmatrix} \text{CO} \\ \text{S} \end{smallmatrix}\right\}\text{C}=\text{C}-\text{C}_{10}\text{H}_6\text{O}$ Helindone Fast Scarlet C paste..... Helindone Fast Scarlet C powder..... Ciba Scarlet G 20 per cent paste.....	M M I	22,265	11,479
908	<b>CIBA RED R</b> paste 20 per cent.....1907 Bromo-2-thio-naphthene-acenaphthene-indigo.	I	1,001	
909	<b>CIBA RED B</b> .....1907 6,6'-Dichloro-bis-thio-naphthene-indigo.	I	0	
910	<b>HELINDONE PINK</b> .....1908 6,6'-Dibromo-dimethyl-bis-thio-naphthene-indigo. Thio Indigo Pink 247 paste..... Thio Indigo Pink 2475 paste..... Thio Indigo Rose AN paste..... Thio Indigo Rose AN paste extra..... Thio Indigo Rose BN paste..... Helindone Pink AN (S.; Kal. 1912)..... Helindone Pink BN paste.....	K K K K K M M	39,393	47,117
910a	<b>CIBA PINK</b> ..... Ciba Pink R powder..... Ciba Pink R paste A.....	I I	2,306	1,292
911	<b>CIBA ORANGE</b> .....1911 Derived from 2-thio-naphthene-acenaphthene-indigo. Ciba Orange G powder..... Ciba Orange G paste.....	I I	222	204
912	<b>THIO INDIGO RED B</b> paste.....1905 Bis-thio-naphthene-indigo.  $\text{C}_6\text{H}_4\left\{\begin{smallmatrix} 1 \\ 2 \end{smallmatrix}\right\}\text{CO}\left\{\begin{smallmatrix} \text{CO} \\ \text{S} \end{smallmatrix}\right\}\text{C}=\text{C}\left\{\begin{smallmatrix} \text{CO} \\ \text{S} \end{smallmatrix}\right\}\text{C}_6\text{H}_4$	K	1,102	
913	<b>HELINDONE ORANGE R</b> .....1907 6,6'-Diethoxy-bis-thio-naphthene-indigo.  $\text{C}_2\text{H}_5\cdot\text{O}\cdot[4]\text{C}_6\text{H}_3\left\{\begin{smallmatrix} 1 \\ 2 \end{smallmatrix}\right\}\text{CO}\left\{\begin{smallmatrix} \text{CO} \\ \text{S} \end{smallmatrix}\right\}\text{C}=\text{C}\left\{\begin{smallmatrix} \text{CO} \\ \text{S} \end{smallmatrix}\right\}\text{C}_6\text{H}_3[4]\cdot\text{O}\cdot\text{C}_2\text{H}_5$ Thio Indigo Orange R powder (Kal. 1911)..... Thio Indigo Orange R paste..... Helindone Orange R..... Helindone Orange R paste.....	K K M M	14,480	5,841
913a	<b>THIO INDIGO YELLOW 3 GN (S.; Kal. 1913)</b> .....	K	22	
914	<b>HELINDONE ORANGE D</b> .....1907 Dibromo-6,6'-diamido-bis-thio-naphthene-indigo.	M	0	
915	<b>HELINDONE FAST SCARLET R</b> .....1907 Dibromo-6,6'-diethoxy-bis-thio-naphthene-indigo.  $\text{C}_2\text{H}_5\text{O}\left\{\begin{smallmatrix} \text{CO} \\ \text{S} \end{smallmatrix}\right\}\text{C}_6\text{H}_2\left\{\begin{smallmatrix} \text{CO} \\ \text{S} \end{smallmatrix}\right\}\text{C}=\text{C}\left\{\begin{smallmatrix} \text{CO} \\ \text{S} \end{smallmatrix}\right\}\text{C}_6\text{H}_2\left\{\begin{smallmatrix} \text{CO} \\ \text{S} \end{smallmatrix}\right\}\text{OC}_2\text{H}_5$ Helindone Fast Scarlet R paste..... Helindone Fast Scarlet RC.....	M M	4,302	1,897



## XVII. INDIGO AND ITS DERIVATIVES—Continued.

No.	Commercial and chemical names and formulas.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
916	HELINDONE SCARLET S.....1907 Diethyl-thio-bis-thio-naphthene-indigo. $C_2H_5 \cdot S \cdot C_6H_3 \left\{ \begin{smallmatrix} CO \\ S \end{smallmatrix} \right\} C=C \left\{ \begin{smallmatrix} CO \\ S \end{smallmatrix} \right\} C_6H_3 \cdot S \cdot C_2H_5$ Thio Indigo Scarlet S paste..... Thio Indigo Scarlet 6086 powder (S.)..... Helindone Scarlet S.....	K K M	5,515	\$5,141
917	HELINDONE RED B powder.....1909 Dichloro-bis-thio-naphthene-indigo. $Cl \cdot C_6H_3 \left\{ \begin{smallmatrix} CO \\ S \end{smallmatrix} \right\} C=C \left\{ \begin{smallmatrix} CO \\ S \end{smallmatrix} \right\} C_6H_3 Cl$	M	100	
918	HELINDONE RED 3 B.....1909 Dichloro-dimethyl-bis-thio-naphthene-indigo. $\begin{smallmatrix} CH_3 \\ Cl \end{smallmatrix} C_6H_3 \left\{ \begin{smallmatrix} CO \\ S \end{smallmatrix} \right\} C=C \left\{ \begin{smallmatrix} CO \\ S \end{smallmatrix} \right\} C_6H_3 \begin{smallmatrix} CH_3 \\ Cl \end{smallmatrix}$ Thio Indigo Red 3 B paste..... Helindone Red 3 B paste.....	K M	27,874	10,942
919	CIBA BORDEAUX B paste 10 per cent.....1907 Brominated Thio Indigo Red B (No. 912). 5,5'-Dibromo-bis-thio-naphthene-indigo. $Br \left[ \begin{smallmatrix} 5 \\ 2 \end{smallmatrix} \right] C_6H_3 \left\{ \begin{smallmatrix} CO \\ S \end{smallmatrix} \right\} C=C \left\{ \begin{smallmatrix} CO \\ S \end{smallmatrix} \right\} C_6H_3 \left[ \begin{smallmatrix} 5 \\ 2 \end{smallmatrix} \right] Br$	I	899	
920	HELINDONE VIOLET.....1912 Dichloro-dimethyl-dimethoxy-bis-thio-naphthene-indigo. Thio Indigo Violet 2 B powder..... Helindone Violet B paste..... Helindone Violet BB paste..... Helindone Violet BB powder..... Helindone Violet R paste.....	K M M M M	28,607	15,945
921	HELINDONE GRAY 2 B, BR.....1910 7,7'-Diamido-thio-indigo and its dichloro derivative.	M	0	
921a	HELINDONE PRINTING BLACK 2 R G paste (Kal. 1914).....1913	M	470	

## XVIII. ANILINE BLACK GROUP.

922	ANILINE BLACK, DIPHENYL BLACK.....1863 Oxidation of aniline or its homologues with chlorates in presence of salts of copper or vanadium; or with bichromates or ferricyanides. Aniline Black 15908..... Diphenyl Black.....	B M	1,470	\$518
923	URSOL.....1888 Hydrochlorides of p-phenylene-diamine, p-amino-phenol, and diamido-diphenylamine, respectively. The colors are produced upon the fiber by subsequent oxidation, using hydrogen peroxide, bichromates, or quinone. Ursol A..... Ursol ADF.....1910 Ursol D crystals..... Ursol D lumps..... Ursol DB..... Ursol GG..... Ursol DF..... Ursol P..... Ursol PP..... Ursol Gray AL (S.; Kal. 1907, 1908, 1909, 1913).....	A A A A A A A A A A	53,720	15,779
923a	NAKO COLORS..... Nako Black DBB..... Nako Black O (S. 1907)..... Nako Blue Black B..... Nako Brown B..... Nako Brown DR (S.)..... Nako Brown 3 GA.....	M M M M M M	285	157

## XVIII. ANILINE BLACK GROUP—Continued.

No.	Commercial and chemical names and formulas.	Manu- facturer.	Importation.	
			Pounds.	Value.
923a	NAKO COLORS—Continued.			
	Nako Brown 3 GN.....	M		
	Nako Brown P.....	M		
	Nako Brown RH.....	M		
	Nako Gray B.....	M		
	Nako Gray 6 B.....	M		
	Nako Yellow O.....	M		
	Nako Yellow O (techn.).....	M		

## XIX. UNCLASSIFIED COAL-TAR COLORS.

A large number of the artificial dyestuffs currently imported into the United States are of unknown composition. Apart from tolerably full data regarding their appearance, reactions, and especially their tinctorial properties, but little, and in most cases nothing, is known concerning the details of manufacture or of the semimanufactured products employed.

The colors belonging to this category, which are recognized as azo colors, are enumerated in a special section, following No. 492, page 110. Those known generally as "sulphur blacks" are given on page 170. The remaining sulphur colors, of unknown derivation, are found in a special section on page 175.

Section XIX includes 904 dyes, falling under 619 headings. Some of these dyes are used on a very extensive scale. Not a few of the number probably might be classed as azo colors, were their character better known. Undoubtedly many trade designations in the following list refer to dyes which are identical in composition with various colors listed serially, or are of a closely allied nature. For commercial reasons the fact of such identity or close relationship has not yet been made public.

As in the case of the azo and sulphur colors of unknown composition or derivation, abundant reference is made to sources of information concerning individual dyes. The arrangement followed is, likewise, the same as that described (p. 110) in connection with unclassified azo colors.

No.	Commercial names.	Manu- facturer.	Importation.	
			Pounds.	Value.
U1	COTTON PURE BLUE R (S.; Kal. 1911).....	A	596	
U2	DEEP FAT BLACK COLOR.....	A	643	
U4	GENTIANA VIOLET B.....	A	24	
U5	GUINEA BLACK 3 BL extra (S.; Kal. 1911).....	A	6,629	
	GUINEA BORDEAUX.....		22,252	\$3,223
U6	Guinea Bordeaux B.....	A		
U7	Guinea Bordeaux 6 B.....	A		
U8	Guinea Bordeaux BL.....	A		
	GUINEA BROWN.....		1,799	437
U9	Guinea Brown R (S.; Kal. 1913).....	A		
U10	Guinea Brown 2 R (S.; Kal. 1913).....	A		
	GUINEA CYANINE.....		4,112	836
U11	Guinea Cyanine LB (Kal. 1914).....	A		
U12	Guinea Cyanine LG (Kal. 1914).....	A		
U13	Guinea Cyanine LR (Kal. 1914).....	A		
	GUINEA FAST GREEN.....		5,236	1,180
U14	Guinea Fast Green B (S.; Kal. 1904).....	A		
U15	Guinea Fast Green 3 B.....	A		
U16	Guinea Fast Green 2 G.....	A		
	GUINEA FAST RED.....		5,619	1,556
U17	Guinea Fast Red BL (S.; Kal. 1914).....	A		
U18	Guinea Fast Red 4 BL.....	A		
U19	Guinea Fast Red 2 R (S.; Kal. 1912).....	A		
	GUINEA FAST VIOLET.....		3,018	1,361
U20	Guinea Fast Violet AL.....	A		
U21	Guinea Fast Violet 10 B (S.; Kal. 1906).....	A		
U22	HAT BLACK B (S.).....	A	2,070	
U23	INDIGO CARMINE BLUE BG (S.).....	A	99	
U24	INDO VIOLET BF (S.; Kal. 1913).....	A	23,060	
U25	LACQUER BLACK R.....	A	99	

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U26	LEATHER OLIVE 71980.....	A	882	
	METACHROME BLUE.....		14,301	\$3,996
U27	Metachrome Blue B (S.; Kal. 1913).....	A		
U28	Metachrome Blue G.....	A		
	METACHROME BLUE BLACK.....		399	124
U29	Metachrome Blue Black 2 B (S.; Kal. 1912, 1913).....	A		
U30	Metachrome Blue Black 2 BX (S.; Kal. 1912, 1913).....	A		
	METACHROME BROWN.....		57,313	7,371
U31	Metachrome Brown BL powder (S.; Kal. 1912, 1913).....	A		
U32	Metachrome Brown BRL (S.; Kal. 1912, 1913).....	A		
U33	METACHROME ORANGE 3 R double powder (S.; Kal. 1911).....	A	1,299	
U34	METACHROME RED G (S.; Kal. 1914).....	A	897	
	METACHROME VIOLET.....		1,063	255
U35	Metachrome Violet B (S.; Kal. 1913).....	A		
U36	Metachrome Violet 2 R (S.; Kal. 1914).....	A		
	MILLING BLUE.....		7,034	1,470
U37	Milling Blue GR extra.....	A		
U38	Milling Blue 5 R extra.....	A		
U39	MILLING ORANGE G (S. 1913).....	A	198	
	MILLING RED.....		4,540	973
U40	Milling Red.....	A		
U41	Milling Red 6 BA.....	A		
U42	Milling Red GA.....	A		
	MILLING YELLOW.....		4,508	1,057
U43	Milling Yellow 3 G (S.; Kal. 1914).....	A		
U44	Milling Yellow GA.....	A		
U44	Milling Yellow GA extra.....	A		
U45	NAPHTHOGENE INDIGO BLUE, R (S.; Kal. 1912).....	A	300	
U46	NAPHTHOGENE PURE BLUE 4 B (S.; Kal. 1911).....	A	498	
	ORCHIL.....		2,373	5,322
U47	Orchil OPAG extra crystals.....	A		
U48	Orchil RCEP.....	A		
U49	Orchil RPH.....	A		
U58	PHOENIX BROWN D extra.....	1903 A	701	
U59	PRIMAL BLACK.....	A	249	
U60	RED FOR LEATHER R.....	A	300	
U61	SCARLET 53446.....	A	13,344	
U63	ACID BLACK 57257.....	A	6,242	
	AMINE BLACK.....		146,163	14,390
U64	Amine Black 4 B (S.; Kal. 1908).....	A		
U64	Amine Black 4 B extra.....	A		
U64	Amine Black 4 B extra 60:100.....	A		
U64	Amine Black 4 B new.....	A		
U64	Amine Black 4 B 89605 new.....	A		
U65	Amine Black 10 B.....	A		
U66	Amine Black 4 BM.....	A		
U67	Amine Black 8 4 B (Kal. 1908).....	A		
U68	Amine Black SL (S.; Kal. 1913).....	A		
U69	AMINE BLACK GREEN B (Kal. 1908).....	A	7,846	
U70	AMINE RED.....	A	201	
U71	BENZOFORM ORANGE G.....	A	1,008	
U72	BENZOFORM RED G.....	A	708	
	BRILLIANT CONGO BLUE.....		500	92
U73	Brilliant Congo Blue B (Kal. 1910).....	A		
U74	Brilliant Congo Blue 5 R (Kal. 1910).....	A		

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U75	BRILLIANT CONGO VIOLET R (S.; Kal. 1910).....	A	2,800	
	BRILLIANT COPPER BLUE.....		5,011	\$1,253
U76	Brilliant Copper Blue BW (S.; Kal. 1910).....	A		
U77	Brilliant Copper Blue GW (S.; Kal. 1911).....	A		
U78	CHROME FAST BLUE 4 B (Kal. 1905).....	A	23,585	
U79	CHROME FAST GARNET BL (S.; Kal. 1911).....	A	2,310	
U80	COLUMBIA BORDEAUX B (S.; Kal. 1906).....	A	6,178	
	COLUMBIA CATECHINE.....		1,965	534
U81	Columbia Catechine 3 B (Kal. 1914).....	A		
U82	Columbia Catechine G (Kal. 1914).....	A		
U83	Columbia Catechine O (Kal. 1914).....	A		
U84	Columbia Catechine R (Kal. 1914).....	A		
	COLUMBIA FAST BLACK.....		82,040	15,756
U86	Columbia Fast Black D extra (S.; Kal. 1913).....	A		
U87	Columbia Fast Black FF extra S (S.; Kal. 1912).....	A		
U88	Columbia Fast Black G extra (S.; Kal. 1912).....	A		
U89	Columbia Fast Black V extra (S.; Kal. 1907).....	A		
U90	ACETYL RED GX (S.; Kal. 1913).....	B	1,499	
U91	ACID KRAFT BROWN max.....	B	4,958	
	ACID RHODAMINE.....		6,463	4,455
U92	Acid Rhodamine B.....	B		
U93	Acid Rhodamine 3 B.....	B		
U94	Acid Rhodamine BG.....	B		
U95	Acid Rhodamine G.....	B		
U95	Acid Rhodamine R.....	B		
U96	AMARANTH DE.....	B	2,304	
	ANTHOSINE.....		3,360	1,918
U97	Anthosine B.....	B		
U98	Anthosine 3 B.....	B		
U99	Anthosine 5 B.....	B		
U100	BASIC KRAFT BROWN Y 2.....	B	11,235	
U101	BLACK E extra conc.....	B	500	
	BLACK BASE.....		7,840	1,502
U102	Black Base BB.....	B		
U103	Black Base S.....	B		
U104	BLUE 214 grains.....	B	397	
U105	BRILLIANT ANTHRAZUROL powder (S. 1902).....	B	1,598	
	BRILLIANT CARMINE.....		6,383	1,412
U106	Brilliant Carmine CL extra.....	B		
U107	Brilliant Carmine GG.....	B		
U108	Brilliant Carmine L.....	B		
U108	Brilliant Carmine L conc.....	B		
	BRILLIANT SCARLET.....		23,382	2,588
U109	Brilliant Scarlet NY 47.....	B		
U110	Brilliant Scarlet 141113.....	B		
U111	BROWN A 1678.....	B	6,038	
U112	CEROFLAVINE.....	B	9	
	CHOCOLATE BROWN.....		196	56
U113	Chocolate Brown G.....	B		
U114	Chocolate Brown R.....	B		
U115	CHROME FAST BLUE B extra (S. 1912).....	B	699	
	CHROME LEATHER BLACK.....		7,569	1,227
U116	Chrome Leather Black E extra conc., easily soluble.....	B		
U117	Chrome Leather Black EA extra.....	B		
U118	CLARET NY Z 1413.....	B	957	

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U119	CLARET RED.....	B	8,948	\$711
U120	Claret Red.....	B		
U121	Claret Red 88.....	B		
U121	CORVOLINE BT lumps.....	B	10,789	
U122	COTTON BROWN.....	B	3,298	720
U123	Cotton Brown CNP.....	B		
U123	Cotton Brown RN.....	B		
U124	COTTON MILLING BLACK.....	B	701	
U125	COTTON PINK B extra.....	B	800	
U126	CRYSTAL ORANGE.....	B	6,596	
U128	DIAMOND MAGENTA.....	B	5,047	1,920
U129	Diamond Magenta small needles.....	B		
U129	Diamond Magenta I small crystals.....	B		
U130	ERGANE YELLOW.....	B	2,328	723
U131	Ergane Yellow G powder.....	B		
U131	Ergane Yellow R powder.....	B		
U132	Ergane Yellow W extra.....	B		
U133	ERGANONE BLUE.....	B	699	139
U134	Erganone Blue B paste.....	B		
U134	Erganone Blue 3 G paste.....	B		
U135	ERGANONE GRAY B paste.....	B	600	
U136	ERGANONE VIOLET R paste.....	B	99	
U137	EXPORT BLUE 1504.....	B	450	
U138	FAST ACID MARINE BLUE HBBX (S.; Kal. 1913).....	B	25,867	
U139	FAST ACID VIOLET ERR extra.....	B	1,001	
U140	FAST LIGHT YELLOW 3 G.....	B	13,420	
U141	FAST SCARLET.....	B	4,848	1,214
U142	Fast Scarlet B 22114.....	B		
U143	Fast Scarlet B K.....	B		
U143	Fast Scarlet B K G.....	B		
U144	GREEN VGW (blue shade).....	B	508	
U145	JAPAN BLACK.....	B	13,974	2,766
U146	Japan Black extra.....	B		
U147	Japan Black B extra.....	B		
U148	Japan Black B base.....	B		
U149	Japan Black M.....	B		
U150	Japan Black MBG.....	B		
U150	Japan Black MF.....	B		
U151	JET BLACK.....	B	19,442	4,779
U152	Jet Black APX.....	B		
U152	Jet Black RR.....	B		
U153	JUTE BLACK.....	By	75	15
U153	Jute Black B (R. 39).....	B		
U153	Jute Black RNT (R. 39. Mixture of Grenadin, Maroon, Mala- chite Green, and Bismarck Brown).....	B		
U154	JUTE COAL BLACK S.....	By	225	
U155	KRAFT BROWN.....	B	43,807	10,218
U155	Kraft Brown L conc.....	B		
U155	Kraft Brown basic YZ.....	B		
U156	LAKE BLUE L.....	B	51	
U157	LAKE PURPLE 3 B.....	B	498	
U158	LEATHER BLACK.....	B	16,433	4,843
U159	Leather Black BO lumps.....	B		
U159	Leather Black CR.....	B		
U160	METHYL SOLUBLE BLUE 3 S conc.....	B	699	

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- facturer.	Importation.	
			Pounds.	Value.
U161	NEPTUNE BROWN RX. (S.; Kal. 1913).....	B	389	
	OIL BLACK.....		22, 003	\$4, 253
U163	Oil Black 6 B liquid.....	B		
U164	Oil Black 6 B grains.....	B		
U164	Oil Black 6 G grains.....	B		
U165	Oil Black HG liquid.....	B		
U166	OIL BLUE liquid.....	B	747	
	OIL ORANGE.....		270	56
U167	Oil Orange R liquid.....	B		
U168	Oil Orange 2 R powder.....	B		
	OIL RED.....		930	314
U169	Oil Red B powder.....	B		
U169	Oil Red B liquid.....	B		
U170	Oil Red G.....	B		
	OIL YELLOW.....		251	113
U171	Oil Yellow G liquid.....	B		
U172	Oil Yellow R powder.....	B		
U173	PALATINITE.....	B	1, 323	
U174	PAPER BLUE TR.....	B	2, 908	
	PAPER BROWN.....		2, 842	507
U175	Paper Brown BB.....	B		
U176	Paper Brown BL.....	B		
U177	Paper Brown RT.....	B		
U178	PARAMINE extra (S.; Kal. 1908; R. 15, 93). (A pigment color.)..	B	3, 528	
U179	PERSIAN RED RD.....	B	540	
	PIGMENT BLACK.....		22, 448	926
U180	Pigment Black paste.....	B		
U181	Pigment Black BP paste.....	B		
U182	PRINTING BROWN G (for wool).....	B	1, 100	
	QUERCITRON SUBSTITUTE.....		16, 812	2, 422
U183	Quercitron substitute WBL.....	B		
U184	Quercitron substitute V.....	B		
U189	RUBINE N.....	B	198	
U190	SPECIAL BLUE G.....	B	899	
U191	STEAM GREEN G.....	B	1, 799	
U192	THIAZINE BROWN R (S.; S. H. IV, 1751).....	B	12, 105	
	TYOPHOR BLACK.....		1, 300	523
U193	Typophor Black FB.....	B		
U194	Typophor Black F 3 R.....	B		
U195	TYOPHOR BROWN FR.....	B	849	
U196	TYOPHOR CARMINE FB.....	B	24	
U197	TYOPHOR RED FG.....	B	247	
	TYOPHOR YELLOW.....		602	362
U198	Typophor Yellow FR.....	B		
U199	Typophor Yellow F 3 R.....	B		
U200	WOOL FAST BLACK B extra.....	B	3, 875	
U201	WOOL FAST BLUE BL.....	B	9, 627	
U202	WOOL FAST ORANGE G.....	B	1, 049	
	WOOL FAST YELLOW.....		1, 500	775
U203	Wool Fast Yellow G.....	B		
U204	Wool Fast Yellow 5 GX.....	B		
U205	Wool Fast Yellow WG.....	B		

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>ACID CHROME BLUE</b> .....		25, 633	\$6, 553
U206	Acid Chrome Blue 3 G (S.; Kal. 1910).....	By		
U207	Acid Chrome Blue 2 R (S.).....	By		
U207	Acid Chrome Blue 2 R paste 60 per cent (S.).....	By		
U208	Acid Chrome Blue 5 R paste 60 per cent (S.; Kal. 1912).....	By		
U209	<b>ACID CHROME RED B</b> .....	By	500	
U210	<b>ACID CHROME VIOLET R</b> .....	By	261	
	<b>ALIZARIN URANOL</b> .....		4, 947	7, 513
U211	Alizarin Uranol 2 B powder (S.; Kal. 1914).....	By		
U212	Alizarin Uranol R powder (S.; Kal. 1912).....	By		
U213	<b>ALKALI FAST GREEN 3 G (S.; Kal. 1907)</b> .....	By	1, 497	
U214	<b>ALKALI VIOLET LR</b> .....	By	3, 318	
	<b>ARTIFICIAL SILK BLACK</b> .....		6, 450	1, 172
U215	Artificial Silk Black G.....	By		
U216	Artificial Silk Black R.....	By		
U217	<b>BLUE 27071</b> .....	By	14, 775	
U218	<b>BLUE BLACK for HALF WOOL G</b> .....	By	104	
U219	<b>BRILLIANT PURE YELLOW 6 G (S.; Kal. 1911)</b> .....	By	849	
	<b>BRILLIANT SKY BLUE</b> .....		4, 002	1, 601
U220	Brilliant Sky Blue 5 B.....	By		
U221	Brilliant Sky Blue G.....	By		
U222	Brilliant Sky Blue 5 G.....	By		
U223	Brilliant Sky Blue 8 G extra.....	By		
U224	<b>BRILLIANT YELLOW conc. 24347</b> .....	By	5, 908	
U225	<b>CERES BLUE 4 (S.). (For lakes)</b> .....	By	150	
	<b>CERES BROWN</b> .....		150	55
U226	Ceres Brown 3 (S.). (For lakes).....	By		
U227	Ceres Brown 4 (S.). (For lakes).....	By		
U228	<b>CERES ORANGE 3 (S.). (For lakes)</b> .....	By	300	
	<b>CERES RED</b> .....		723	400
U229	Ceres Red 3 (S.). (For lakes).....	By		
U230	Ceres Red 6 (S.). (For lakes).....	By		
U231	<b>CHROME FAST BROWN TP</b> .....	By	1, 852	
U232	<b>CHROME FAST ORANGE RD paste</b> .....	By	201	
U233	<b>CHROME LEATHER BLACK E extra</b> .....	By	5, 570	
U239	<b>CHROME LEATHER BLACK M (S.)</b> .....	By	902	
U235	<b>CHROME ORANGE GR 26722 (S.; Kal. 1912)</b> .....	By	1, 393	
U236	<b>CHROMOXANE BLUE R (S.; Kal. 1911; R. 66). (A triphenylme- thane mordant dye)</b> .....	By	301	
U237	<b>CHROMOXANE VIOLET 5 B (S.; Kal. 1912; R. 66)</b> .....	By	2, 106	
	<b>CLARET LAKE</b> .....		15, 290	319
U238	Claret lake BL.....	By		
U238	Claret lake BL paste.....	By		
U239	<b>FAST LEATHER YELLOW 26855</b> .....	By	49	
U240	<b>FAST PRINTING YELLOW R powder</b> .....	By	498	
U241	<b>FUR BLACK DM 27503</b> .....	By	24	
U242	<b>FUR GRAY 27635</b> .....	By	24	
U243	<b>GALLO VIOLET D paste</b> .....	By	498	
U244	<b>GALLO VIOLET DF 27964 (S.; Kal. 1900)</b> .....	By	24	
U245	<b>GLORIA BLACK N</b> .....	By	2, 044	

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U246	HALF WOOL BLUE 3 R (Kal. 1913).....	By	20,610	
U247	LAKE YELLOW 28227 paste.....	By	51	
U248	LEATHER BROWN GG.....	By	4,685	
U249	MONOCHROME BLACK F (Kal. 1912).....	By	123	
U250	MONOCHROME BLACK BLUE G (Kal. 1913).....	By	89	
U251	MONOCHROME BLUE 5 R (Kal. 1913).....	By	198	
	MONOCHROME BROWN.....		3,933	\$360
U252	Monochrome Brown BX.....	By		
U253	Monochrome Brown G.....	By		
U254	Monochrome Brown V.....	By		
U255	PAPER FAST BORDEAUX B (S.; Kal. 1911).....	By	1,693	
	RED LAKE.....		9,686	1,426
U256	Red Lake RL extra.....	By		
U256	Red Lake RL 27428.....	By		
U256	Red Lake extra paste 27429.....	By		
U257	Red Lake RMT 27445.....	By		
U258	RHODULINE BLUE 6 G (S.; Kal. 1905, 1913).....	By	597	
U259	RHODULINE HELIOTROPE 3 B (S. 1905).....	By	298	
U260	STRAW BLUE G (Kal. 1913).....	By	690	
U261	SULPHON ACID BLACK N 2 B extra (Kal. 1914).....	By	1,321	
U262	SULPHON ACID GREEN B (S.; Kal. 1910)..... 1908	By	1,248	
U263	SUPRAMINE BROWN R (S.; Kal. 1911)..... 1909	By	225	
U264	SUPRAMINE YELLOW R (S.; Kal. 1911)..... 1909	By	624	
	TOLUYLENE FAST BROWN.....		4,400	1,165
U265	Toluylene Fast Brown 3 G (Kal. 1911).....	By		
U266	Toluylene Fast Brown 2 R (Kal. 1911).....	By		
U267	UNIVERSAL BLACK B (Kal. 1912).....	By	6,080	
	VICTORIA FAST VIOLET.....		1,347	510
U268	Victoria Fast Violet B extra (Kal. 1910).....	By		
U269	Victoria Fast Violet 2 R extra (Kal. 1911).....	By		
U270	VICTORIA NAVY BLUE L (S.; Kal. 1909)..... 1908	By	5,747	
	WOOL FAST BLUE.....		19,238	6,331
U271	Wool Fast Blue BL (S.; Kal. 1907)..... 1904	By		
U272	Wool Fast Blue GL (S.; Kal. 1907)..... 1906	By		
U273	ACID BROWN.....	C	199	
U274	ANTHRACENE DIRECT GREEN 68 Z 2288.....	C	112	
U275	BENZINE BLACK 55 J 1938.....	C	2,662	
U276	BENZINE BLUE 55 H 1937.....	C	300	
U277	BLACK SOLUBLE IN OIL.....	C	500	
U278	BLUE JB.....	C	101	
	BRILLIANT LANAFUCHSINE.....		11,289	1,757
U279	Brilliant Lanafuchsine 63 S 2154 (S.).....	C		
U280	Brilliant Lanafuchsine 63 T 2155 (S.).....	C		
	BRILLIANT MILLING BLUE.....		7,322	1,682
U281	Brilliant Milling Blue 46 P 1719 (S.; Kal. 1905). Triphenyl- methane dye for wool.....	C		
U281	Brilliant Milling Blue 21 S 1097.....	C		
U281	Brilliant Milling Blue 67 W 2260.....	C		
U282	BRILLIANT NAPHTHOL BLUE 29 K 1289 (S.; Kal. 1906). (Current marks, G, R.).....	C	1,598	



## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U283	BRILLIANT SCARLET..... Brilliant Scarlet 57 O 1995. (Current marks, G, GG, 2665 J, 2666 J, R, 2 R, 3 R, 4 R, 6 R.).....	C	41,082	\$4,317
U283	Brilliant Scarlet 57 Q 1997.....	C		
U283	Brilliant Scarlet 57 R 1998.....	C		
U283	Brilliant Scarlet 57 S 1999.....	C		
U284	CARBAZOLE WOOL GREEN 69 O 2302.....	C	999	
U285	CERASINE BROWN AN (S.; the cerasine colors include cer- tain azo and triphenylmethane dyes soluble in water, alcohol, oils, and fats).....	C	448	
U286	CRYSTAL SCARLET 6 R.....	C	1,801	
	HAVANA BROWN.....		8,396	1,265
U287	Havana Brown S.....	C		
U287	Havana Brown S conc.....	C		
U288	ISAMINE BLUE..... Isamine Blue 30 A 1305 (S.; Kal. 1908, 1912). (Current marks, B, 6 B, 8 B, R.).....	C	5,038	1,350
U288	Isamine Blue 30 H 1312.....	C		
U288	Isamine Blue 30 O 1318.....	C		
U289	LAKE BLACK C.....	C	3,098	
	LEATHER BLACK.....		11,784	3,063
U290	Leather Black 60 D 2217. (Current marks, TB, TBB, TG.).....	C		
U290	Leather Black 66 E 2218.....	C		
U290	Leather Black 66 F 2219.....	C		
U290	Leather Black 12 G 851.....	C		
U290	Leather Black 52 X 1877.....	C		
U291	MINERAL BLUE 6 B 513.....	C	999	
U292	NAPHTHOL DARK GREEN G.....	C	2,280	
	NERAZINE.....		44,676	8,484
U293	Nerazine 69 B 2290 (Kal. 1909). (Current marks, G, GA.).....	C		
U293	Nerazine 51 J 1838.....	C		
U293	Nerazine 31 L 1340.....	C		
U293	Nerazine 55 Z 1954.....	C		
	PARAPHOSPHINE.....		4,506	957
U294	Paraphosphine 11 K 839 (Kal. 1905). (Current marks, AGE, G, GG, L, P, R.).....	C		
U294	Paraphosphine 11 L 840.....	C		
U294	Paraphosphine 14 Y 928.....	C		
	PATENT BLACK.....		7,808	919
U295	Patent Black 18 S 1022. (Current marks, N, I, II).....	C		
U295	Patent Black 15 W 951.....	C		
U295	Patent Black 15 X 952.....	C		
	SOLID BLUE.....		1,350	262
U296	Solid Blue FF 57. (Current marks, BD, 2 BD, BRD, 6 G, RR, 3 R, 3 RD.).....	C		
U296	Solid Blue 41 W 1801.....	C		
U299	VIGOREUX GREEN B.....	C	1,499	
U300	WOOL BLUE 15 S 947.....	C	500	
	ACID BLUE.....		1,587	747
U301	Acid Blue.....	K		
U301	Acid Blue extra greenish.....	K		
U301	Acid Blue AG.....	K		
U301	Acid Blue OG.....	K		
U302	ACID CHROME BLUE.....	K	481	
U303	ACID OLIVE 2764.....	K	959	
	ACID RED.....		30,099	6,238
U304	Acid Red 2 B.....	K		
U304	Acid Red 4 B.....	K		
U304	Acid Red G.....	K		
U304	Acid Red 3 G.....	K		
U304	Acid Red 4 R.....	K		

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>ACID RED—Continued.</b>			
U304	Acid Red 3 S.....	K		
U304	Acid Red 019.....	K		
U304	Acid Red R 0185.....	K		
U304	Acid Red 1622.....	K		
U304	Acid Red 1642.....	K		
U304	Acid Red 1645.....	K		
U305	ANTHRARUBINE 395.....	K	265	
	<b>AZURE BLUE.....</b>		3,302	\$1,730
U306	Azure Blue extra. (Current marks, V, VE, Z.).....	K		
U306	Azure Blue A extra.....	K		
U306	Azure Blue A extra 452.....	K		
U306	Azure Blue ASI.....	K		
U306	Azure Blue O extra.....	K		
U306	Azure Blue VS extra.....	K		
U307	BASIC BLACK TES.....	K	648	
	<b>BIEBRICH ACID BLUE.....</b>		3,215	1,127
U308	Biebrich Acid Blue G (S.; S. J., 2d ed., 839). (Current marks, G, B, 2 B.).....	K		
U308	Biebrich Acid Blue V.....	K		
U309	BLUE CRYSTALS 3085.....	K	240	
U310	BLUE RESIDUE BW 6 M.....	K	212	
U312	BRILLIANT ACID RED G.....	K	212	
U313	BRILLIANT AZURE BLUE VS.....	K	441	
U314	BRILLIANT DELPHINE BLUE B.....	K	223	
U315	BRILLIANT DIAZINE BLUE 1230 (S.). (Current marks, B, 2 B.).....	K	200	
U316	BRILLIANT MILLING BLUE B extra.....	K	2,044	
U317	BRILLIANT PATENT BLUE A.....	K	63	
U318	CANDLE BLUE.....	K	1,367	
U319	CANDLE VIOLET.....	K	1,323	
U320	CARMINE BLUE V extra.....	K	1,761	
	<b>CARPET RED.....</b>		15,445	1,040
U321	Carpet Red B.....	K		
U321	Carpet Red BT.....	K		
U321	Carpet Red R.....	K		
	<b>CHROME BLACK.....</b>		3,556	807
U322	Chrome Black 2841 (S. H. IV, 1518).....	K		
U322	Chrome Black LV extra.....	K		
U323	CHROME BLUE BLACK B.....	K	1,561	
	<b>CHROME GREEN.....</b>		6,871	1,947
U324	Chrome Green C.....	K		
U324	Chrome Green 0585. (Current marks, C, N.).....	K		
U324	Chrome Green 2761.....	K		
U324	Chrome Green 2762.....	K		
U325	CHROME RED 2593.....	K	350	
U326	CHROME VIOLET BROWN 9457.....	K	798	
	<b>CLOTH BLUE.....</b>		3,261	979
U327	Cloth Blue 1769.....	K		
U327	Cloth Blue 1770.....	K		
U327a	CLOTH SCARLET 2584.....	K	697	
	<b>COTTON BLUE.....</b>		8,134	2,523
U328	Cotton Blue BR.....	K		
U328	Cotton Blue B 224 extra.....	K		
U328	Cotton Blue CC.....	K		

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U329	COTTON BROWN.....	K	15,079	\$4,959
U329	Cotton Brown B.....	K		
U329	Cotton Brown 4 G.....	K		
U329	Cotton Brown O.....	K		
U329	Cotton Brown 2 R.....	K		
U329	Cotton Brown V.....	K		
U330	COTTON DARK GREEN.....	K	1,949	517
U330	Cotton Dark Green B.....	K		
U330	Cotton Dark Green N.....	K		
U330	Cotton Dark Green N extra.....	K		
U331	COTTON GREEN powder.....	K	3,523	
U332	COTTON MARINE BLUE 4676.....	K	79,085	
U333	COTTON ORANGE.....	K	21,665	5,116
U333	Cotton Orange.....	K		
U333	Cotton Orange FB.....	K		
U333	Cotton Orange GK.....	K		
U333	Cotton Orange RR.....	K		
U333	Cotton Orange R 2 O.....	K		
U334	COTTON SCARLET 1602. (Current mark, 3 B.).....	K	858	
U335	DIRECT BLACK.....	K	42,277	8,438
U335	Direct Black D.....	K		
U335	Direct Black DB.....	K		
U335	Direct Black G.....	K		
U335	Direct Black 8 R.....	K		
U335	Direct Black T.....	K		
U335	Direct Black WC.....	K		
U335	Direct Black 3899.....	K		
U335	Direct Black 3919.....	K		
U335	Direct Black 5535.....	K		
U336	DIRECT BLUE.....	K	57,224	14,318
U336	Direct Blue A. (Current marks, B, 3 BN.).....	K		
U336	Direct Blue BK.....	K		
U336	Direct Blue 7 B.....	K		
U336	Direct Blue 12 B.....	K		
U336	Direct Blue FF 712.....	K		
U336	Direct Blue GRC.....	K		
U336	Direct Blue N 2 B.....	K		
U336	Direct Blue R.....	K		
U336	Direct Blue 5 R.....	K		
U336	Direct Blue X 2 B.....	K		
U336	Direct Blue 3681.....	K		
U336	Direct Blue 3688.....	K		
U336	Direct Blue 3694.....	K		
U337	DIRECT BROWN.....	K	21,828	4,799
U337	Direct Brown B.....	K		
U337	Direct Brown B extra.....	K		
U337	Direct Brown H.....	K		
U337	Direct Brown TB.....	K		
U337	Direct Brown 1795.....	K		
U337	Direct Brown 3839.....	K		
U337	Direct Brown 3845.....	K		
U338	DIRECT COTTON BLUE.....	K	5,546	1,555
U338	Direct Cotton Blue GS.....	K		
U338	Direct Cotton Blue RDB.....	K		
U339	DIRECT COTTON GREEN 2 B.....	K	1,318	
U340	DIRECT COTTON GRAY.....	K	220	
U341	DIRECT DARK GREEN.....	K	2,079	
U342	DIRECT DARK VIOLET BE.....	K	789	
U343	DIRECT DEEP BLACK NTS.....	K	4,079	
U344	DIRECT FAST BLUE FFB.....	K	1,543	
U345	DIRECT FAST BROWN.....	K	1,750	358
U345	Direct Fast Brown C.....	K		
U345	Direct Fast Brown GB.....	K		
U345	Direct Fast Brown GB extra.....	K		
U345	Direct Fast Brown GB 160.....	K		

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manufacturer.	Importation.	
			Pounds.	Value.
U346	DIRECT FAST GRAY RN.....	K	220	
	DIRECT FAST SCARLET.....		324	\$117
U347	Direct Fast Scarlet 4 BS extra.....	K		
U347	Direct Fast Scarlet 8 BS.....	K		
U348	DIRECT FAST VIOLET 3654.....	K	126	
	DIRECT NAVY BLUE.....		3,440	764
U349	Direct Navy Blue.....	K		
U349	Direct Navy Blue B.....	K		
U350	DIRECT PURPLE N extra.....	K	110	
U351	DIRECT RED N.....	K	5,764	
U352	DRAZALINE BLUE FF.....	K	1,217	
	FAST ACID VIOLET.....		2,208	1, 8'
U353	Fast Acid Violet 3 B.....	K		
U353	Fast Acid Violet R.....	K		
U353	Fast Acid Violet 416.....	K		
U354	GREEN G.....	K	1,175	
	GREEN RESIDUE.....		2,066	105
U355	Green residue.....	K		
U355	Green residue D.....	K		
	GREEN CRYSTALS.....		4,559	981
U356	Green Crystals DIIa.....	K		
U356	Green Crystals Iia.....	K		
U356	Green Crystals X.....	K		
U357	GRAY BLUE 0095.....	K	752	
U358	LEATHER BLACK.....	K	809	
U359	LEATHER BROWN.....	K	220	
U360	LEMON YELLOW R.....	K	754	
	NAPHTHAMINE FAST BLACK.....		34,203	10, 671
U361	Naphthamine Fast Black KS (S.; Kal. 1912).....	K		
U362	Naphthamine Fast Black 229 (S.; Kal. 1905, 1908, 1914). (Current marks, SE, SDE, VE.).....	K		
U362	Naphthamine Fast Black 3924.....	K		
U362	Naphthamine Fast Black 3925.....	K		
U362	Naphthamine Fast Black 3934.....	K		
U362	Naphthamine Fast Black 4672.....	K		
U362	Naphthamine Fast Black 4680.....	K		
U362	Naphthamine Fast Black 4683.....	K		
U362	Naphthamine Fast Black 4685.....	K		
U363	NAPHTHAMINE FAST BORDEAUX BG (S. 1913).....	K	4	
	NAPHTHAMINE FAST SCARLET.....		2,938	1, 616
U364	Naphthamine Fast Scarlet B 221 (S.; Kal. 1912, 1913). (Current marks, B, 4 B, 8 B, BG, R.).....	K		
U364	Naphthamine Fast Scarlet 8 B.....	K		
U364	Naphthamine Fast Scarlet R 3613.....	K		
U364	Naphthamine Fast Scarlet 2215.....	K		
U364	Naphthamine Fast Scarlet 3614.....	K		
U365	NAPHTHAMINE SCARLET 3603 (S.). (Current marks, B, GS, R.).....1895	K	1,415	
U366	NAPHTHOFORM BLACK 3930.....	K	2,653	
U367	NAVY BLUE 17184.....	K	406	
U368	NEW DIRECT BLUE S.....	K	4,659	
	OIL BLACK.....		1,452	210
U369	Oil Black IK. (Current marks, KL, 49 A, 49 B, 11534, 12022).....	K		
U369	Oil Black 112.....	K		
U369	Oil Black 1996.....	K		
U369	Oil Black 11534.....	K		
U370	OIL BLUE BLACK 114 in lumps.....	K	432	

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U371	OIL BROWN BG.....	K	26	
	OIL ORANGE.....		6,689	\$1,235
U372	Oil Orange AR. (Current marks, A, B, GR, 26.).....	K		
U372	Oil Orange SI.....	K		
U372	Oil Orange 5581.....	K		
U372	Oil Orange 5585.....	K		
U372	Oil Orange 5589.....	K		
	OIL RED.....		1,519	251
U373	Oil Red CR. (Current marks, R, RL,—Fat Ponceau.).....	K		
U373	Oil Red 5582.....	K		
U373	Oil Red 5591.....	K		
	OIL YELLOW.....		1,557	307
U374	Oil Yellow RB. (Current marks, BG, BNA, PH.).....	K		
U374	Oil Yellow 5503.....	K		
U374	Oil Yellow 5505.....	K		
U374	Oil Yellow 13843.....	K		
U375	PAPER GREEN D.....	K	220	
U376	PAPER ORANGE CR.....	K	459	
U377	PAPER ORANGE residue.....	K	1,390	
	PAPER SCARLET.....		24,372	3,102
U378	Paper Scarlet 3101.....	K		
U378	Paper Scarlet 3102.....	K		
U378	Paper Scarlet 3108.....	K		
U379	PARAZOLE BROWN RK (Kal. 1914).....	K	245	
U380	PHENOCROME YELLOW 946.....	K	223	
U381	PINK.....	K	780	
U382	PRINTING YELLOW (greenish).....	K	2,875	
U383	PURE YELLOW DG.....	K	1,817	
U384	REDDISH BROWN.....	K	4,757	
	SCARLET.....		29,634	3,362
U385	Scarlet OX.....	K		
U385	Scarlet P.....	K		
U385	Scarlet PO.....	K		
U385	Scarlet 2 PR.....	K		
U385	Scarlet 2 R.....	K		
U385	Scarlet X.....	K		
U385	Scarlet XX.....	K		
U385	Scarlet 1610.....	K		
U385	Scarlet residue.....	K		
	SILK GRAY.....		336	599
U386	Silk Gray CB.....	K		
U386	Silk Gray extra 281.....	K		
U387	SULPHOLINE G 300.....	K	223	
	SULPHUR YELLOW.....		942	284
U388	Sulphur Yellow ES.....	K		
U388	Sulphur Yellow G extra.....	K		
	WOOL BLACK.....		118,791	29,453
U390	Wool Black B extra.....	K		
U390	Wool Black CD.....	K		
U390	Wool Black CL.....	K		
U390	Wool Black LR 64238.....	K		
U390	Wool Black LR 64295.....	K		
U390	Wool Black NC.....	K		
U390	Wool Black NR.....	K		
U390	Wool Black V.....	K		
U390	Wool Black (greenish).....	K		
U390	Wool Black 050.....	K		
U390	Wool Black 538.....	K		
U390	Wool Black 0495.....	K		
U390	Wool Black 2008.....	K		
U390	Wool Black 2009.....	K		
U390	Wool Black 2021.....	K		

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- facturer.	Importation.	
			Pounds.	Value.
	<b>WOOL BLUE</b>		<b>22,080</b>	<b>\$8,854</b>
U391	Wool Blue G extra (S.)	K		
U321	Wool Blue 2 G	K		
U391	Wool Blue G 446 N	K		
U391	Wool Blue S	K		
U391	Wool Blue 2 S	K		
U391	Wool Blue TB	K		
U391	Wool Blue 1774	K		
U391	Wool Blue 1775	K		
U391	Wool Blue 1779	K		
U391	Wool Blue 2721	K		
U391	Wool Blue 3226	K		
U392	<b>WOOL BLUE BLACK 2019</b>	K	<b>1,292</b>	
	<b>WOOL BROWN</b>		<b>40,736</b>	<b>6,233</b>
U393	Wool Brown P	K		
U393	Wool Brown MC	K		
U393	Wool Brown SVR	K		
U393	Wool Brown UB	K		
U393	Wool Brown 2808	K		
U394	<b>WOOL CERISE SR</b>	K	<b>16,038</b>	
	<b>WOOL GREEN</b>		<b>20,255</b>	<b>5,488</b>
U395	Wool Green I. (Kal. 1911). (Current mark C.)	K		
U325	Wool Green SD	K		
U325	Wool Green 1851	K		
U395	Wool Green 1852	K		
U396	<b>WOOL SCARLET 1638</b> . (Current marks, B, 2 B, 3 B, 4 B, R, 2 KG, X.)	K	<b>317</b>	
	<b>WOOL VIOLET</b>		<b>12,584</b>	<b>2,429</b>
U397	Wool Violet R	K		
U398	Wool Violet SL (S.; Kal. 1905, 1907)	K		
	<b>WOOL YELLOW</b>		<b>17,465</b>	<b>2,629</b>
U399	Wool Yellow AT	K		
U399	Wool Yellow D	K		
U399	Wool Yellow G	K		
U399	Wool Yellow LDV	K		
U399	Wool Yellow R	K		
U399	Wool Yellow 1501	K		
U400	<b>ACID BLUE 466</b>	M	<b>500</b>	
U401	<b>ALIZARIN AZURINE D 3 R</b>	M	<b>125</b>	
	<b>ALIZARIN CHROME BROWN</b>		<b>5,775</b>	<b>1,112</b>
U402	Alizarin Chrome Brown DG	M		
U403	Alizarin Chrome Brown DR	M		
U404	<b>ALIZARIN CLARET R paste</b>	M	<b>1,323</b>	
	<b>ALIZARIN CLARET RED</b>		<b>1,000</b>	<b>169</b>
U405	Alizarin Claret Red DB	M		
U406	Alizarin Claret Red DG	M		
	<b>ALIZARIN CRIMSON</b>		<b>2,875</b>	<b>529</b>
U407	Alizarin Crimson DB	M		
U408	Alizarin Crimson DG	M		
U409	<b>ALIZARIN DIRECT CYANINE FA</b>	M	<b>2,786</b>	
	<b>ALIZARIN DIRECT YELLOW</b>		<b>4,250</b>	<b>421</b>
U410	Alizarin Direct Yellow DR	M		
U411	Alizarin Direct Yellow DS	M		
U412	<b>ALIZARIN FAST BLUE DGL</b>	M	<b>125</b>	
	<b>ALIZARIN FAST BROWN</b>		<b>2,500</b>	<b>461</b>
U413	Alizarin Fast Brown DB	M		
U414	Alizarin Fast Brown D 3 R	M		
U415	Alizarin Fast Brown 3 R	M		
U416	<b>ALIZARIN FAST GRAY DBL</b>	M	<b>52</b>	
U417	<b>ALIZARIN FAST ORANGE DO</b>	M	<b>500</b>	

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U418	ALIZARIN FAST RED D 244.....	M	2,000	
U419	ALIZARIN FAST SCARLET.....	M	2,000	\$530
U420	Alizarin Fast Scarlet D 6 BS.....	M		
U421	ALIZARIN GRAY G.....	M	7,502	
U422	ALIZARIN LIGHT RED D 8 BW.....	M	500	
U423	ALIZARIN PURE BLUE.....	M	31,000	7,349
U423	Alizarin Pure Blue DPH.....	M		
U423	Alizarin Pure Blue DPH extra conc.....	M		
U424	ALIZARIN PURE YELLOW DHS.....	M	500	
U425	AMIDO BLUE.....	M	1,250	219
U426	Amido Blue B (S.; Kal. 1911).....	M		
U426	Amido Blue GGR.....	M		
U427	AMIDO DARK BOTTLE GREEN B.....	M	500	
U428	BLACK BLACK O.....	M	750	
U429	CHROMAZINE BLUE G powder (S.; Kal. 1914).....	M	1,130	
U430	CHROMOGENE VIOLET B (S.; Kal. 1914).....	M	375	
U431	DICYANINE.....	M	88	
U433	DRAZALINE YELLOW R extra strong.....	M	553	
U434	EXCELSIOR SCARLET.....	M	40	9
U435	Excelsior Scarlet G.....	M		
U435	Excelsior Scarlet 3 R.....	M		
U436	FAST ACID YELLOW RBE.....	M	551	
U437	HANSA GREEN G powder.....	M	2,000	
U438	HANSA RUBINE.....	M	6,000	2,271
U439	Hansa Rubine G powder (S.).....	M		
U439	Hansa Rubine O.....	M		
U440	HANSA YELLOW.....	M	11,014	4,553
U440	Hansa Yellow G lumps.....	M		
U440	Hansa Yellow G paste.....	M		
U441	Hansa Yellow 5 G lumps.....	M		
U442	Hansa Yellow R lumps.....	M		
U442	Hansa Yellow R paste.....	M		
U443	LAKE BLUE.....	M	5,527	352
U443	Lake Blue ABII.....	M		
U444	Lake Blue ABOII.....	M		
U445	Lake Blue AV.....	M		
U446	Lake Blue AVO.....	M		
U447	LEATHER BLACK T.....	M	750	
U448	LEATHER RED O.....	M	50	
U449	METHYLENE HELIOTROPE O (S.; Kal. 1913).....	M	2,500	
U450	NEOTOLYL BLACK.....	M	1,280	294
U450	Neotolyl Black B (S.).....	M		
U451	Neotolyl Black BB extra (S.).....	M		
U452	Neotolyl Black 4 B extra (S.).....	M		
U453	Neotolyl Black TL extra (S.; Kal. 1913).....	M		
U454	Neotolyl Black VL extra (S.; Kal. 1913).....	M		
U455	NEUTRAL BLUE 3 R (S.; Kal. 1905).....	M	750	
U456	NEUTRAL VIOLET O (S. 1897). (A triphenylmethane dye for wool.).....	M	4,000	
U457	NEW ETHYL BLUE.....	M	250	92
U458	New Ethyl Blue BS (S. 1903).....	M		
U458	New Ethyl Blue RS.....	M		

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U459	PAPER BLUE MD.....	M	1,350	
U460	PARATOL CHROME YELLOW L.....	M	17,336	
U461	PARATOL FAST YELLOW G.....	M	250	
	PARATOL LAKE RED.....		2,300	\$336
U462	Paratol Lake Red KP lumps.....	M		
U462	Paratol Lake Red KP paste.....	M		
U463	Paratol Lake Red LC.....	M		
U463	Paratol Lake Red LC paste.....	M		
U464	Paratol Lake Red LP.....	M		
U464	Paratol Lake Red LP paste.....	M		
	PARATOL SCARLET.....		41,000	8,271
U465	Paratol Scarlet 3 B.....	M		
U465	Paratol Scarlet 3 BX.....	M		
U466	PINACYANOL.....	M	40	
U467	RAPID FILTER GREEN I.....	M	66	
U468	RAPID FILTER RED I.....	M	66	
U469	RED FOR LEATHER O.....	M	50	
	ROSAZEINE.....	M	17,500	8,536
U470	Rosazeine B extra.....	M		
U471	Rosazeine B 5.....	M		
U472	Rosazeine 6 G extra.....	M		
U473	SILK WOOL BLACK 3 B (S.; Kal. 1913).....	M	50	
U474	SOLID BROWN O.....	M	2,400	
	SULPHO ROSAZEINE.....		575	274
U475	Sulpho Rosazeine B.....	M		
U476	Sulpho Rosazeine G.....	M		
U477	VIGOUREUX BROWN L.....	M	250	
U478	ACID RED 6 BF.....	BK	551	
U479	BROWN.....	BK	1,653	
U480	DIRECT SCARLET FB.....	BK	551	
U481	FAST CHROME BLACK K conc.....	BK	2,205	
U482	FAST WOOL SCARLET 4 R conc.....	BK	1,102	
U483	LAKE BLUE RT.....	BK	1,323	
U484	LEATHER GOLD 5902.....	BK	220	
	SILK YELLOW.....		831	615
U485	Silk Yellow N conc.....	BK		
U486	Silk Yellow N.....	BK		
U487	YELLOW NF.....	BK	331	
U488	YELLOW BLACK M conc.....	BK	2,205	
U489	YELLOW GREEN 6 B conc. 9130.....	BK	1,764	
U490	COTTON BLUE BCB crystals.....	CG	661	
U491	DIRECT PURE BLUE conc. 9853.....	CG	1,323	
U492	FAST PAPER YELLOW G 100 per cent.....	CG	331	
U493	PERMANENT BLUE GR extra.....	CG	220	
	BLACK.....		4,600	1,606
U494	Black 207.....	CJ		
U494	Black 208.....	CJ		
U494	Black 213.....	CJ		
U494	Black 260.....	CJ		
U494	Black 265.....	CJ		
U494	Black 280.....	CJ		



## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U495	OIL BLACK.....		2,223	\$693
U495	Oil Black 1444.....	CJ		
U495	Oil Black 8485.....	CJ		
U496	OIL RED 7327.....	CJ	1,001	
	RED.....		962	498
U497	Red 232.....	CJ		
U497	Red 233.....	CJ		
U497	Red 234.....	CJ		
U497	Red 235.....	CJ		
U497	Red 247.....	CJ		
U497	Red 274.....	CJ		
U497	Red 291.....	CJ		
	ROSE.....		2,552	731
U498	Rose 207.....	CJ		
U498	Rose 230.....	CJ		
U498	Rose 270.....	CJ		
U498	Rose 271.....	CJ		
U498	Rose 272.....	CJ		
U498	Rose 281.....	CJ		
U499	SPIRIT BLACK.....		1,378	326
U499	Spirit Black 144.....	CJ		
U499	Spirit Black 25048.....	CJ		
	YELLOW.....		580	206
U500	Yellow 221.....	CJ		
U500	Yellow 222.....	CJ		
U500	Yellow 224.....	CJ		
U500	Yellow 238.....	CJ		
U501	ACID CRESOL BLACK 4196.....	GrE	1,997	
	BLUE.....		2,919	881
U502	Blue 3 BB.....	GrE		
U503	Blue BB 3 BB.....	GrE		
U504	Blue BBJ.....	GrE		
U505	Blue BBR.....	GrE		
U506	Blue RR.....	GrE		
U507	GRELA RED R.....	GrE	399	
	HAT BLACK.....		231	35
U508	Hat Black A 3432.....	GrE		
U508	Hat Black 4 AN.....	GrE		
U508	Hat Black L 3485.....	GrE		
U508	Hat Black S 3459.....	GrE		
	INK BLUE.....		2,495	1,612
U509	Ink Blue BNOO (S.; Kal. 1909).....	GrE		
U509	Ink Blue BJTBNOO.....	GrE		
U509	Ink Blue BJTNO.....	GrE		
	CRESOL BLACK.....		37,323	4,246
U510	Cresol Black A 4287.....	GrE		
U510	Cresol Black FB (S.; Kal. 1909).....	GrE		
U510	Cresol Black 6 B (Kal. 1909, 1913).....	GrE		
U510	Cresol Black 6 B (Kal. 1909).....	GrE		
U510	Cresol Black 3 GOO.....	GrE		
U510	Cresol Black K 5 B (Kal. 1913).....	GrE		
U510	Cresol Black KV (Kal. 1912).....	GrE		
U510	Cresol Black NDNOOOO.....	GrE		
U510	Cresol Black X 6 B (Kal. 1913).....	GrE		
U510	Cresol Black 4236.....	GrE		
U511	LEATHER BLACK 3553.....	GrE	653	
U512	OXY ACID RED 6 BO.....	GrE	51	
U513	RED BLUE BSR.....	GrE	49	
U514	BLUE 16519.....	L	110	
U515	CHROME GREEN G.....	L	230	
U516	COTTON GREEN 2 G.....	L	375	

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U517	CRESYL FAST VIOLET 2 B extra (S. 1905).....	L	110	
U518	FAST COTTON BLUE 6 GO.....	L	331	
U519	HALF WOOL GREEN.....	L	1,146	\$173
U520	Half Wool Green 63816.....	L		
	Half Wool Green 63816 N 5.....	L		
U521	MILLING BROWN G (S. J., 2d ed., 1903)..... 1896	L	1,543	
U522	ACID CORINTH.....	tM	1,025	
U523	ACIDOL VIOLET BR.....	tM	522	
	BLUE.....		1,206	401
U524	Blue 5 BS crystals.....	tM		
U525	Blue 3 R grains.....	tM		
U526	CHRYSLARINE A extra conc.....	tM	15,756	
U527	CYANINE BLUE.....	tM	2,634	
U528	DEEP BLACK D conc.....	tM	6,736	
U529	FAST GREEN B extra.....	tM	1,124	
U532	HYLIDINE PONCEAU 2 R.....	tM	2,066	
U533	JUTE BLACK I.....	tM	1,102	
U534	LAKE SCARLET 2 R.....	tM	2,496	
U535	LEATHER BLACK R powder.....	tM	628	
U536	LIQUID OIL BLACK N.....	tM	560	
U537	MARINE BLUE RR 85 per cent color (S.).....	tM	6,990	
	ALKALI BLACK.....		3,196	776
U538	Alkali Black conc.....	WD		
U538	Alkali Black.....	WD		
U539	ALKALI RUBINE.....	WD	2,248	
U540	ANTHRANOL GREEN B.....	WD	2,011	
U541	CELESTIAL BLUE.....	WD	110	
U542	CHROME LEATHER BLACK I.....	WD	2,526	
U543	CRYSTAL SCARLET.....	WD	287	
U544	FAST COTTON YELLOW.....	WD	123	
U545	FAST RUSSIAN GREEN (S.; Kal. 1908).....	WD	220	
U547	PYROPHOSPHINE C.....	WD	445	
U548	VARNISH BLACK.....	WD	1,653	
U549	YELLOW (for feathers).....	WD	44	
	SULPHO GREEN.....		330	89
U550	Sulpho Green B (S.; Kal. 1911).....	NF		
U550	Sulpho Green C.....	NF		
U551	ACID FAST VIOLET conc.....	AW	608	
U552	BASIC BLUE BA.....	AW	441	
	BLACK.....		21,239	4,769
U553	Black BH extra strong.....	AW		
U554	Black HB extra conc.....	AW		
U555	BLUE CV.....	AW	55	
	BOMA BLACK.....		4,794	1,064
U556	Boma Black BH extra strong.....	AW		
U557	Boma Black BHX.....	AW		
U558	BOMA PINK.....	AW	117	

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U559	BOMA YELLOW BBF.....	AW	498	
U560	CARMINE BLUE A extra.....	AW	3,303	
U561	CARMINE BRILLIANT BLUE.....	AW	1,531	
	CHROMINE BLUE.....		333	\$310
U562	Chromine Blue.....	AW		
U563	Chromine Blue B.....	AW		
	CHROMINE BROWN.....		3,507	1,144
U564	Chromine Brown R extra.....	AW		
U565	Chromine Brown V.....	AW		
U566	CHROMINE FAST BLUE S.....	AW	5,335	
U567	CHROMINE VIOLET 2 R.....	AW	230	
U568	CHOCOLATE BROWN (for leather).....	AW	121	
U569	CRIMSON BENINE G.....	AW	1,319	
	DEVELOPED BLACK.....		24,475	9,501
U570	Developed Black B extra.....	AW		
U571	Developed Black N.....	AW		
U571	Developed Black N extra.....	AW		
U572	Developed Black R.....	AW		
U573	Developed Black W.....	AW		
U574	DEVELOPED BLUE GG.....	AW	110	
U575	DEVELOPED BROWN M.....	AW	55	
U576	DEVELOPED GREEN F.....	AW	55	
U577	DIAMOND VIOLET BB.....	AW	608	
U578	FAST CHROME BLACK.....	AW	3,466	
U579	FAST GARNET 5 B extra.....	AW	608	
U580	FAST PARME extra conc.....	AW	1,215	
U581	FAST WOOL BLUE I (S. J., 3d ed.).....	AW	1,327	
U582	FASTILENE BLUE F.....	AW	203	
U583	FASTILENE GREEN GG.....	AW	137	
	FASTILENE VIOLET.....		235	220
U584	Fastilene Violet B.....	AW		
U585	Fastilene Violet E.....	AW		
U586	FASTILENE YELLOW.....	AW	633	
U587	GREEN BX.....	AW	608	
U588	PARA YELLOW (S.; Kal. 1913).....	AW	110	
	SULPHOLINE.....		3,047	725
U589	Sulpholine G extra S.....	AW		
U590	Sulpholine R extra.....	AW		
U591	VIOLETTINE 3 R.....	AW	1,001	
U592	CARMINE special.....	P	198	
U593	FRENCH RED (S. J., 2d ed., 73).....	P	99	
U594	SEAL BROWN W.....	P	500	
U595	FRAISE.....	P	2,930	
U596	BROWN PCC paste.....	DH	496	
U597	CHROMOPURPURINE II paste.....	DH	332	
U598	FAT COLOR.....	DH	25	
U599	LILAC PC paste.....	DH	450	

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U600	RED PC paste.....	DH	500	
U601	YELLOW PC paste.....	DH	636	
U602	ACID CORINTH 240 S.....	G	551	
	ACID PURE BLUE.....		5,521	\$2,137
U603	Acid Pure Blue R superfine (S.; Kal. 1907).....	G		
U604	Acid Pure Blue RC (S.; Kal. 1907).....	G		
U605	BLACK soluble in fats.....	G	220	
U606	BLUE PCV paste.....	G	476	
	BROWN.....		703	166
U607	Brown GC (Rolips).....	G		
U607	Brown PCC.....	G		
	CHROMAL FAST BROWN.....		110	23
U608	Chromal Fast Brown G powder.....	G		
U609	Chromal Fast Brown R powder.....	G		
	ERIO VIOLET.....		21,345	6,117
U610	Erio Violet BC (S. 1910).....	G		
U611	Erio Violet RLC (S. 1910).....	G		
U612	ERIOCHROMAL BROWN EB conc. (Kal. 1914).....	G	55	
U613	ERIOCHROMAL GRAY 5 G conc. (Kal. 1914).....	G	55	
U614	ERIOCHROME GERANOL R conc.....	G	55	
	ERIOCHROME GREEN.....		7,220	2,702
U615	Eriochrome Green H.....	G		
U616	Eriochrome Green L (S.; Kal. 1909).....	G		
U617	Eriochrome Green M (Kal. 1909).....	G		
U618	Eriochrome Green O.....	G		
U619	ERIOCHROME OLIVE G (S. 1906).....	G	2,337	
	ERIOFLOXINE.....		3,440	394
U620	Eriofloxine 6 B (S.; Kal. 1912).....	G		
U621	Eriofloxine 2 G (S.; Kal. 1912).....	G		
U621	Eriofloxine 2 G superfine.....	G		
U622	FAST BLACK superfine.....	G	441	
	FAST BLUE.....		2,933	609
U623	Fast Blue BB conc.....	G		
U624	Fast Blue Z.....	G		
U625	FAST BROWN GS.....	G	992	
U626	GALLAZOL BLUE 4 G paste (S.; Kal. 1911).....	G	110	
U627	HYLIDINE PONCEAU 2 R.....	G	1,102	
U628	INDIAN RED pure conc.....	G	882	
U629	JASMINE high conc. (Kal. 1912).....	G	5,776	
U630	LAKE BLACK P.....	G	904	
U631	LILAC PC.....	G	441	
U632	METHYL GALLUS BLUE.....	G	441	
	POLAR ORANGE.....		805	211
U633	Polar Orange GS conc. (Kal. 1914).....	G		
U634	Polar Orange RC (Kal. 1914).....	G		
	POLAR RED.....		2,821	692
U635	Polar Red 3 B conc. (Kal. 1914).....	G		
U636	Polar Red G conc. (S.; Kal. 1913).....	G		
U637	Polar Red R conc. (S.; Kal. 1913).....	G		
U638	Polar Red RS conc. (Kal. 1914).....	G		
	POLAR YELLOW.....		782	257
U639	Polar Yellow G superfine (Kal. 1914).....	G		
U640	Polar Yellow 2 G conc.....	G		
U641	Polar Yellow R conc. (Kal. 1914).....	G		

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U642	RED PC paste.....	G	482	
U643	SELLA BRILLIANT YELLOW P superfine.....	G	534	
U644	SELLA FLAVINE G conc.....	G	243	
U645	SPIRIT BLACK.....	G	661	
U646	WOOL BLACK 6 G extra conc.....	G	1,102	
U647	WOOL YELLOW S.....	G	1,053	
	ACETYLENE BLUE.....		1,000	\$273
U648	Acetylene Blue 3 B (S.; S. J., 2d ed., 949). (Derivative of naphthacetyl-disulphonic acid).....	G		
U649	Acetylene Blue 6 B (S.).....	G		
U650	ANTHRACENE ACID GREEN (S.; a triphenylmethane deriva- tive).....	G	99	
U651	BENZYL BLUE B (S. 1903).....	I	99	
	BENZYL BORDEAUX.....		2,505	379
U652	Benzyl Bordeaux B (S. 1903).....	I		
U652	Benzyl Bordeaux 17619.....	I		
U653	BLUE CA.....	I	55	
U654	BRILLIANT FAST BLACK.....	I	330	
	CHROME ACID BLACK.....		4,500	800
U655	Chrome Acid Black (S. 1905).....	I		
U656	Chrome Acid Black RSI new.....	I		
U657	CHROME FAST BLUE R (S.; Kal. 1903).....	I	1,001	
U658	CHROME FAST BLUE 13366.....	I	1,213	
U659	CLOTH FAST BLACK B (Kal. 1914).....	I	324	
	CLOTH FAST BLUE.....		3,796	830
U660	Cloth Fast Blue B.....	I		
U661	Cloth Fast Blue GTB conc. 300 per cent.....	I		
U662	Cloth Fast Blue R.....	I		
U663	COLUMBO BLUE 4 R.....	I	220	
U664	CYANOGEN BLUE 13623.....	I	1,764	
U665	FAST ACID NAVY BLUE GRI conc.....	I	225	
U666	FAST BRILLIANT BLACK 12349.....	I	110	
U667	INDIA ROSE bluish 17285.....	I	165	
U668	KITON BLUE N conc.....	I	2,403	
U669	KITON FAST ORANGE G (Kal. 1913, 1914).....	I	496	
	KITON FAST YELLOW.....		3,157	1,223
U670	Kiton Fast Yellow 3 G (S.; Kal. 1910).....	I		
U671	Kiton Fast Yellow R.....	I		
	KITON RED.....		615	188
U672	Kiton Red 6 B (Kal. 1913).....	I		
U673	Kiton Red G (Kal. 1913).....	I		
U674	KITON VIOLET 12 B (Kal. 1908).....	I	476	
	KITON YELLOW.....		2,204	1,682
U675	Kiton Yellow G.....	I		
U676	Kiton Yellow GG (S.; Kal. 1908).....	I		
U677	LEATHER BLACK I.....	I	2,504	
U678	NAPHTHOCROME VIOLET R.....	I	1,400	
U679	OPALINE BLUE R.....	I	551	
U680	PHENANTHRENE CHROME BLUE.....	I	386	

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U681	PINK B extra (S. 1907).....	I	772	
U682	SEPIA BLACK.....	I	10,537	\$2,367
U682	Sepia Black FW.....	I		
U682	Sepia Black 14908.....	I		
U683	SOLFIGENE BLUE GREEN.....	I	230	132
U684	Solfigene Blue Green 16444.....	I		
U684	Solfigene Blue Green B 300 per cent.....	I		
U685	SOLFIGENE CUTCH.....	I	230	
U686	SOLFIGENE CYANINE.....	I	331	
U687	SOLFIGENE DEEP BLACK.....	I	31,949	9,509
U688	Solfigene Deep Black 14717.....	I		
U688	Solfigene Deep Black 14986.....	I		
U689	SOLFIGENE GREEN GG.....	I	494	
U690	TOLAMINE VIOLET.....	I	1,001	
U691	TONKA BROWN GS.....	I	1,574	
U692	TURMERIC YELLOW 000 conc.....	I	999	
U693	WOOL FAST BLUE L.....	I	99	
U694	ACID RED FL.....	S	2,315	
U695	BLUE.....	S	12,657	3,627
U695	Blue AS 24426.....	S		
U696	Blue N.....	S		
U697	Blue 25.....	S		
U698	Blue 26.....	S		
U699	BRILLIANT BLUE G.....	S	99	
U700	BROWN 43 conc.....	S	99	
U701	CALCUTTA BLUE 2.....	S	26,669	
U702	CHROME LEATHER BLACK E extra.....	S	99	
U703	CHROME LEATHER BROWN R.....	S	66	
U704	DIRECT FAST SCARLET 4 BS.....	S	441	
U705	DIRECT SCARLET.....	S	4,903	1,667
U706	Direct Scarlet B.....	S		
U706	Direct Scarlet 3 B.....	S		
U707	GREEN 21.....	S	3,836	
U708	MERIDIAN BLACK.....	S	15,157	3,316
U709	Meridian Black AE.....	S		
U709	Meridian Black AN.....	S		
U710	METAMINE BROWN.....	S	1,201	349
U710	Metamine Brown conc.....	S		
U710	Metamine Brown conc. 5½ : 10.....	S		
U711	OMEGA CHROME CYANINE R paste 50 per cent (Kal. 1913).....	S	21,001	
U712	OMEGA CHROME RED B conc. 5 : 10.....	S	333	
U713	PAPER BLUE 33593 crystals.....	S	331	
U714	ULTRA FLAVINE SD (Kal. 1914).....	S	22	
U715	YELLOW 15.....	S	606	
U716	ALPHA BLACK.....		12,100	2,948
U716	Alpha Black 6 BN.....	CV		
U717	Alpha Black JC extra.....	CV		
U718	ALPHA CHROME BLUE A extra.....	CV	5,900	
U719	ALPHA CHROME BROWN.....		1,250	473
U719	Alpha Chrome Brown 6 GA.....	CV		
U720	Alpha Chrome Brown N.....	CV		

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U721	ALPHA CHROME GREEN 6 B.....	CV	100	
U722	ALPHA CHROME ORANGE RK.....	CV	50	
U723	ALPHA CHROME RED 3 B.....	CV	200	
U724	ALPHA CHROME YELLOW C.....	CV	5,700	
	BRILLIANT BLUE.....		5,500	\$2,905.
U725	Brilliant Blue A conc.....	CV		
U726	Brilliant Blue GG conc.....	CV		
	CYANTHRACENE BLUE.....		250	180.
U727	Cyanthracene Blue 3 B.....	CV		
U728	Cyanthracene Blue 2 BL.....	CV		
U729	CYANTHRACENE YELLOW S.....	CV	100	
U730	DIAZOMINE RED L extra.....	CV	250	
	CACHOU.....		54,591	3,420.
U731	Cachou GL.....	Lev		
U731	Cachou OX.....	Lev		
U731	Cachou R.....	Lev		
U731	Cachou 2 R.....	Lev		
U731	Cachou 125.....	Lev		
U731	Cachou 192.....	Lev		
U731	Cachou 209.....	Lev		
U731	Cachou 761.....	Lev		
U732	COTTON DARK GREEN 138.....	Lev	100	
	COTTON GREEN.....		4,921	318.
U733	Cotton Green A.....	Lev		
U733	Cotton Green B.....	Lev		
U733	Cotton Green 88 A.....	Lev		
U733	Cotton Green 105 A.....	Lev		
U734	COTTON OLIVE.....	Lev	40	
	COTTON VIOLET.....		2,004	487.
U735	Cotton Violet X.....	Lev		
U735	Cotton Violet 43 A.....	Lev		
U736	DARK PURPLE printing paste.....	Lev	522	
U737	FAST MORDANT BLUE B (Kal. 1907).....	Lev	92	
	LEATHER ORANGE.....		1,704	258.
U738	Leather Orange B.....	Lev		
U739	Leather Orange BY.....	Lev		
	VULCAN BLUE.....		300	324.
U740	Vulcan Blue BO.....	Lev		
U741	Vulcan Blue G.....	Lev		
U742	WOOL CLARET 21 B.....	Lev	1,344	
	WOOL CLARET RED.....		1,542	258.
U743	Wool Claret Red 87 B.....	Lev		
U743	Wool Claret Red 211.....	Lev		
U743	Wool Claret Red 357.....	Lev		
	ALIZADINE BLACK.....		12,979	1,986.
U744	Alizadine Black.....	H		
U744	Alizadine Black 8 per cent.....	H		
U744	Alizadine Black M.....	H		
U745	ALIZADINE DEEP BROWN 3 R (S.; 1910).....	H	678	
U746	ALIZADINE ORANGE M extra (Kal. 1911).....	H	400	
U748	ALIZADINE YELLOW Y (S. 1907).....	H	400	
	BLACK.....		128,805	14,731.
U749	Black CE.....	H		
U749	Black DX.....	H		
U749	Black M 30 per cent.....	H		
U749	Black M 40 per cent.....	H		
U749	Black N.....	H		

## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
	<b>BLACK—Continued.</b>			
U749	Black RW.....	H		
U749	Black X.....	H		
U749	Black 47044 25 per cent.....	H		
U749	Black 61787.....	H		
U749	Black 65450.....	H		
U749	Black 69206.....	H		
U749	Black 74642.....	H		
	<b>BLUE.....</b>		7,373	\$1,975
U750	Blue D8.....	H		
U750	Blue 46237 7½ per cent.....	H		
U750	Blue 49141.....	H		
U750	Blue 51096.....	H		
U750	Blue 52996.....	H		
U750	Blue 73302.....	H		
U751	CALCUTTA BLACK D 10 per cent.....	H	560	
U752	CONCENTRATED BLUE BB 120.....	H	193	
U753	DISULPHINE BLUE 47073 D8.....	H	3,156	
U754	MERCEROL BROWN 3 R (Kal. 1909).....	H	350	
U755	MERCEROL ORANGE 2 R (Kal. 1909).....	H	696	
U756	MERCERINE WOOL SCARLET 5 B (S. 1906).....	H	100	
	<b>NAPHTHALENE BLACK.....</b>		6,996	1,450
U757	Naphthalene Black 12 B (S. 1903).....	H		
U758	Naphthalene Black D.....	H		
	<b>OIL BLACK.....</b>		1,839	297
U759	Oil Black 11410.....	H		
U759	Oil Black 39694.....	H		
U760	OIL COLOR BROWN.....	H	27	
U761	OIL COLOR CANARY.....	H	74	
U762	OIL COLOR YELLOW.....	H	113	
U763	PINK M.....	H	100	
U764	RAVEN BLACK 34588.....	H	1,328	
U765	WOOL CANARY OD.....	H	2,734	
	<b>XL BLUE.....</b>		10,047	2,126
U770	XL Blue.....	H		
U770	XL Blue GR.....	H		
U771	XL GREEN Y (S. 1910).....	H	1,320	
U772	XL MAROON.....	H	10	
	<b>YELLOW.....</b>		2,123	445
U773	Yellow 20.....	H		
U773	Yellow FY.....	H		
U773	Yellow 33413.....	H		
U773	Yellow 41471.....	H		
U774	ACID PURPLE.....	Q	480	117
	<b>ACID RED.....</b>		1,530	263
U775	Acid Red CB.....	Q	1,110	131
U776	Acid Red G.....	Q	720	131
	<b>ACID SCARLET.....</b>		6,114	775
U777	Acid Scarlet G.....	Q	1,260	229
U778	Acid Scarlet 2 R.....	Q	4,262	428
U779	Acid Scarlet SG.....	Q	492	68
U780	ACID SILVER GRAY.....	Q	55	101
U781	ACID VIOLET BLUE.....	Q	33	52
U782	ACID VIOLET RED.....	Q	33	46
U783	ALIZARIN LAKE.....	Q	697	1,126



## XIX. UNCLASSIFIED COAL-TAR COLORS—Continued.

No.	Commercial names.	Manu- fac- turer.	Importation.	
			Pounds.	Value.
U784	ALIZARIN ROSE GWG.....	Q	606	\$20
U785	AUSTRIAN BLACK.....	Q	44	69
U786	AZOMINE YELLOW.....	Q	1,200	208
U787	Azomine Yellow G.....	Q	480	77
U787	Azomine Yellow R.....	Q	720	131
U788	BASIC GRAY.....	Q	245	44
U789	BASIC VIOLET.....	Q	240	68
U790	BLUE.....	Q	1,102	589
U790	Blue DB.....	Q	220	118
U791	Blue DR.....	Q	882	471
U792	BORDEAUX BLACK.....	Q	4,603	962
U793	BRILLIANT BLUE.....	Q	150	77
U793	Brilliant Blue 217.....	Q	99	62
U794	Brilliant Blue 286.....	Q	51	15
U795	BRILLIANT BROWN 205.....	Q	150	43
U796	COTTON VIOLET.....	Q	1,433	655
U796	Cotton Violet 2 B.....	Q	331	93
U797	Cotton Violet 5 B.....	Q	882	395
U798	Cotton Violet R conc.....	Q	220	167
U799	DICHOINE BROWN.....	Q	2,640	302
U800	DIRECT SCARLET AB.....	Q	1,102	238
U801	FAST CHROME BLUE FR.....	Q	1,102	428
U802	FRENCH BLUE.....	Q	55	87
U803	GREEN 241.....	Q	51	19
U804	OLD GOLD.....	Q	927	292
U805	OLEATE GREEN O extra.....	Q	82	37
U806	PINK COLOR.....	Q	240	39
U807	RED COLOR.....	Q	25	24
U808	RED SCARLET.....	Q	110	46
U810	SCARLET XK.....	Q	551	68
U811	SILK YELLOW N.....	Q	1,102	712
U812	SOLID BROWN.....	Q	1,440	297
U812	Solid Brown.....	Q	1,200	243
U813	Solid Brown KF.....	Q	240	54
U814	SOLID RED B.....	Q	1,680	307
U815	THIO VESUVINE BB extra.....	Q	121	10
U816	VARNISH BLACK 5 R.....	Q	1,653	345
U817	YELLOW NF.....	Q	661	521

COAL-TAR DYESTUFFS, WITHOUT SPECIAL DESIGNATION, IMPORTED INTO THE UNITED STATES DURING THE FISCAL YEAR ENDING JUNE 30, 1914.

	Pounds.	Value.		Pounds.	Value.
Pink.....	308	\$242	Violet.....	531	\$181
Red.....	3,052	1,053	Brown.....	2,794	780
Orange.....	213	74	Black.....	3,447	379
Yellow.....	2,180	600	Not specified.....	9,303	2,791
Green.....	475	254			
Blue.....	1,995	1,003	Total.....	24,298	7,357



## INDEX OF DYESTUFFS.

The dyestuffs enumerated in the preceding list are classified in accordance with their chemical nature. In order to facilitate rapid reference from a purely commercial standpoint, they are here arranged in alphabetical order.

Reference is made to the serial numbers (1-923) for colors of known composition.

Colors of unknown composition are found in four categories:

1. Azo colors, Nos. A1 to A765, beginning at page 110.
2. Sulphur Black colors, Nos. 720(A)a to 720(H)i, beginning at page 170.
3. Sulphur colors (other than Sulphur Black), Nos. S1 to S181, beginning at page 175.
4. Other unclassified colors, Nos. U1 to U817, beginning at page 196.

The references in parentheses, (Sch.), (H. & M.), (By Co.), (W. B.), (C. D. Co.), (Cons. C. C. Co.), and (Hub), indicate colors currently manufactured prior to 1915 in American dyestuff works, as enumerated on pages 26 to 29.

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Acetyl Red GX.....	B	U90	Acid Blue.....	K	U301
Acetylene Blue 3 B.....	G	U648	Acid Blue greenish.....	K	U301
Acetylene Blue 6 B.....	C	U640	Acid Blue B.....	S	565
Acid Alizarin Black.....	M	159	Acid Blue 7 B.....	S	565b
Acid Alizarin Black R.....	M	159	Acid Blue BA.....	Q	543c
Acid Alizarin Black SR.....	CV	288a	Acid Blue C.....	Q	543c
Acid Alizarin Blue BB, GR.....	M	790	Acid Blue DRS.....	Q	543c
Acid Alizarin Garnet R.....	M	155	Acid Blue E.....	AW	543c
Acid Alizarin Green B, G.....	M	796	Acid Blue EX.....	S	565b
Acid Alizarin Green 3 G.....	I	796a	Acid Blue OG.....	K	U301
Acid Alizarin Yellow GGW.....	M	294	Acid Blue AG.....	K	U301
Acid Anthracene Brown M.....	By	88a	Acid Blue PN.....	Q	543c
Acid Anthracene Brown P.....	By	88a	Acid Blue R.....	AW	543c
Acid Anthracene Brown PG.....	By	88a	Acid Blue R.....	S	565b
Acid Anthracene Brown R.....	By	88	Acid Blue 5 R.....	Q	543c
Acid Anthracene Brown RH.....	By	88a	Acid Blue V.....	AW	543c
Acid Anthracene Brown W.....	By	88a	Acid Blue Y.....	AW	543c
Acid Anthracene Brown WSG.....	By	88a	Acid Blue 466.....	M	U400
Acid Anthracene Red 3 B.....	By	400	Acid Blue 22244.....	S	565b
Acid Anthracene Red 5 BL.....	By	400a	Acid Blue 23579.....	S	565b
Acid Anthracene Red G.....	By	400a	Acid Blue Black.....	AW	A531
Acid Black.....	AW	217e	Acid Brilliant Red 2 B.....	By	A146
Acid Black AO.....	I	217e	Acid Brown.....	C	U273
Acid Black AS.....	Q	269c	Acid Brown R.....	K	212a
Acid Black 10 B.....	(WB)	217	Acid Brown RN.....	G	212a
Acid Black 6 BA.....	CG	217e	Acid Brown SR.....	K	212a
Acid Black 4 BD.....	I	217e	Acid Brown V.....	I	212a
Acid Black BR.....	G	269c	Acid Brown Y.....	P	212
Acid Black BR.....	tM	269	Acid Chrome Black G.....	I	A147a
Acid Black D.....	I	217e	Acid Chrome Black LG.....	By	A147
Acid Black E.....	By	A144	Acid Chrome Black RH.....	By	A148
Acid Black EW.....	Q	269c	Acid Chrome Black RH.....	G	A610
Acid Black G.....	I	217e	Acid Chrome Black RIIN.....	BK	A148a
Acid Black H.....	S	217e	Acid Chrome Black WS.....	By	A149
Acid Black HA.....	I	217e	Acid Chrome Black 1551.....	CV	A723
Acid Black HAS.....	I	217e	Acid Chrome Blue.....	K	U302
Acid Black KB.....	Q	269c	Acid Chrome Blue (reddish).....	AW	A532
Acid Black M.....	By	A145	Acid Chrome Red B.....	By	U200
Acid Black M.....	BK	217e	Acid Chrome Blue B.....	CV	A724
Acid Black M.....	II	269c	Acid Chrome Blue 3 G.....	By	U206
Acid Black SO.....	S	217e	Acid Chrome Red N.....	CV	A725
Acid Black 32.....	II	269c	Acid Chrome Blue 2 R.....	By	U207
Acid Black 2034.....	K	217e	Acid Chrome Blue 5 R.....	By	U208
Acid Black 2195.....	BK	217e	Acid Chrome Violet R.....	By	U210
Acid Black 57257.....	A	U63	Acid Corinth.....	tM	U522
Acid Blue.....	AW	543c	Acid Corinth 240 S.....	G	U602
Acid Blue.....	(H&M)	539	Acid Cresol Black 4196.....	GrE	U501

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Acid Crimson.....	S	166a	Acid Violet 4 B.....	By	530
Acid Crimson D.....	Q	166a	Acid Violet 4 B.....	K	530a
Acid Cyanine BF.....	A	705b	Acid Violet 4 B.....	Q	530a
Acid Dark Green.....	I	505b	Acid Violet 5 B.....	AW	530
Acid Eosine CA.....	B	590a	Acid Violet 5 B.....	By	530
Acid Eosine G.....	B	590a	Acid Violet 5 B.....	G	530a
Acid Eosine 3 G.....	CJ	590a	Acid Violet 5 B.....	K	530a
Acid Eosine L new.....	B	590a	Acid Violet 6 B.....	A	529
Acid Eosine LB.....	B	590a	Acid Violet 6 B.....	G	530
Acid Eosine L 27314.....	B	590a	Acid Violet 6 B.....	H	548
Acid Eosine SP.....	B	590a	Acid Violet 6 B.....	tM	530
Acid Eosine 1632.....	K	590a	Acid Violet 7 B.....	AW	527
Acid Eosine 13389.....	CJ	590a	Acid Violet 7 B.....	B	534
Acid Fast Blue SB.....	(WB)	189	Acid Violet 7 B.....	H	534
Acid Fast Blue SR.....	(WB)	188	Acid Violet 7 B.....	I	534
Acid Fast Green 8 B.....	AW	A533	Acid Violet 7 B.....	K	530a
Acid Fast Violet.....	AW	U551	Acid Violet 8 B.....	By	527a
Acid Green.....	I	504	Acid Violet 8 B.....	B	530
Acid Green.....	tM	502a	Acid Violet 8 BC.....	M	530a
Acid Green.....	WD	505	Acid Violet 8 BF.....	B	530a
Acid Green (V. M.).....	C	505a	Acid Violet 8 BL.....	B	530a
Acid Green 2 A.....	tM	502a	Acid Violet 8 BLOO.....	K	530a
Acid Green B.....	tM	502a	Acid Violet 8 BN.....	B	527
Acid Green 2 BA.....	tM	502a	Acid Violet 8 BN.....	B	548
Acid Green 2 B.....	P	502	Acid Violet 8 BN.....	I	548
Acid Green G.....	K	505	Acid Violet 8 BN.....	tM	530
Acid Green GG.....	By	505	Acid Violet 8 BN.....	WD	548
Acid Kraft Brown.....	B	U91	Acid Violet 7 BN.....	By	527
Acid Magenta.....	By	524	Acid Violet 7 BN.....	M	533
Acid Magenta.....	C	524	Acid Violet 6 BNB.....	By	527
Acid Magenta.....	H	524	Acid Violet 6 BNG.....	G	530
Acid Magenta.....	(Sch)	524	Acid Violet 3 BNO.....	B	530a
Acid Magenta 6 B.....	CV	524	Acid Violet 6 BNO.....	B	530a
Acid Magenta B.....	G	524	Acid Violet 6 BNOO.....	K	530a
Acid Magenta F.....	G	524	Acid Violet 4 BNS.....	S	527
Acid Magenta FCN3.....	GrE	524	Acid Violet 5 BNS.....	S	561
Acid Magenta G.....	G	524	Acid Violet 4 BS.....	Q	530
Acid Magenta O.....	M	524	Acid Violet 6 BS.....	WD	548
Acid Magenta S.....	A	524	Acid Violet BSC.....	K	530a
Acid Magenta S.....	B	524	Acid Violet 4 BV.....	AW	530a
Acid Magenta S.....	GrE	524	Acid Violet BW.....	By	527a
Acid Magenta 2.....	CV	524	Acid Violet C 2 B.....	B	530a
Acid Magenta Crystals I.....	CV	524	Acid Violet C 10 B.....	B	530a
Acid Milling Scarlet.....	ClCo	484	Acid Violet C 10 B.....	AW	530a
Acid Navy Blue SL.....	AW	A534	Acid Violet D.....	S	561a
Acid Olive 2704.....	K	U393	Acid Violet HB.....	H	534a
Acid Phosphine R.....	CR	606d	Acid Violet HW.....	By	527a
Acid Pure Blue R.....	G	U603	Acid Violet KB.....	K	530a
Acid Pure Blue RC.....	G	U604	Acid Violet NFDS.....	H	534a
Acid Purple.....	Q	U774	Acid Violet NG.....	K	530a
Acid Red 2 B.....	K	U304	Acid Violet PW.....	B	530a
Acid Red 4 B.....	K	U304	Acid Violet R.....	By	527a
Acid Red 6 BF.....	BK	U478	Acid Violet R.....	G	530a
Acid Red CB.....	Q	U775	Acid Violet R.....	Q	530a
Acid Red FL.....	S	U684	Acid Violet 4 R.....	B	530a
Acid Red G.....	K	U304	Acid Violet 4 R.....	By	527a
Acid Red G.....	Q	U776	Acid Violet 4 R.....	I	534a
Acid Red 3 G.....	K	U304	Acid Violet 4 RN.....	K	530a
Acid Red R.....	K	U304	Acid Violet 4 RS.....	M	526
Acid Red 4 R.....	K	U304	Acid Violet RX.....	H	534a
Acid Red S.....	AW	A536	Acid Violet S.....	S	561a
Acid Red 3 S.....	K	U304	Acid Violet SB.....	Q	530a
Acid Red 019.....	K	U304	Acid Violet 1704.....	K	530a
Acid Red 1622.....	K	U304	Acid Violet 2405.....	tM	530a
Acid Red 1642.....	K	U304	Acid Violet 4746.....	BK	530a
Acid Red 1645.....	K	U304	Acid Violet 10471.....	I	534a
Acid Rhodamine B.....	B	U92	Acid Violet 10475.....	I	534a
Acid Rhodamine 3 B.....	B	U93	Acid Violet 18502.....	I	534a
Acid Rhodamine BG.....	B	U94	Acid Violet 26449.....	S	561a
Acid Rhodamine G.....	B	U95	Acid Violet Blue.....	Q	U781
Acid Rhodamine R.....	B	U95	Acid Violet Red.....	Q	U782
Acid Rosamine A.....	M	583	Acid Wool Black.....	Q	217h
Acid Rubine.....	CJ	524	Acid Yellow.....	A	137
Acid Scarlet G.....	Q	U777	Acid Yellow.....	AW	137
Acid Scarlet 2 R.....	Q	U778	Acid Yellow AC.....	K	137
Acid Scarlet 8 G.....	Q	U779	Acid Yellow D.....	A	139
Acid Silk Black R.....	By	A150	Acid Yellow FY.....	H	137
Acid Silver Gray.....	Q	U780	Acid Yellow G.....	A	137
Acid Sky Blue.....	AW	A535	Acid Yellow G.....	BK	137
Acid Violet (V. M.).....	C	530a	Acid Yellow G.....	Q	137
Acid Violet B.....	BK	530a	Acid Yellow G.....	S	137
Acid Violet BB.....	B	530a	Acid Yellow GG.....	GrE	136
Acid Violet 2 B.....	H	534a	Acid Yellow GF.....	H	137
Acid Violet 2 B.....	K	530a			

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Acid Yellow LR.....	K	137	Alizarin XP.....	By	785a
Acidol Azo Violet R.....	tM	A512	Alizarin 744.....	M	778
Acidol Azo Violet S.....	tM	A513	Alizarin 1140.....	M	778
Acidol Fast Violet A 2 R.....	tM	A514	Alizarin Astrol.....	By	856
Acidol Violet BR.....	tM	U523	Alizarin Azurine D 3 R.....	M	U401
Acridino Golden Yellow.....	G	602a	Alizarin Black (V.M.).....	C	774b
Acridine Golden Yellow 54666 A.....	L	602a	Alizarin Black AB.....	AW	774b
Acridine Orange NOO.....	L	603	Alizarin Black AB.....	CV	774b
Acridine Orange R.....	L	604	Alizarin Black AC.....	M	806a
Acridine Red B.....	L	569	Alizarin Black B.....	By	774b
Acridine Yellow.....	L	602	Alizarin Black 3 B.....	By	774b
Agalma Black 4 BX.....	B	217a	Alizarin Black 8 B.....	AW	774b
Agalma Black 10 BX.....	B	217	Alizarin Black DES.....	M	806a
Agalma Black 201211.....	B	217a	Alizarin Black EN.....	M	806a
Agalma Black Green T.....	B	217b	Alizarin Black ENT.....	M	806a
Agalma Green B.....	B	542	Alizarin Black IA.....	By	774b
Algol Blue G.....	By	844a	Alizarin Black P.....	M	806
Algol Blue 3 G.....	By	844	Alizarin Black R.....	M	806a
Algol Blue K.....	By	839	Alizarin Black S.....	B	774
Algol Blue 3 RP.....	By	821	Alizarin Black SE.....	M	807
Algol Bordeaux 3 B.....	By	829	Alizarin Black SET.....	M	807
Algol Brilliant Orange FR.....	By	822	Alizarin Black SN.....	M	807
Algol Brilliant Red 2 B.....	By	819	Alizarin Black SNT.....	M	807
Algol Brilliant Violet 2 B.....	By	821	Alizarin Black SR.....	B	774
Algol Brilliant Violet R.....	By	820	Alizarin Black WR.....	B	774
Algol Brown B.....	By	869	Alizarin Blue (V.M.).....	C	803a
Algol Brown R.....	By	869a	Alizarin Blue A.....	By	803a
Algol Corinth R.....	By	870	Alizarin Blue A.....	M	803
Algol Dark Green B.....	By	847a	Alizarin Blue AS.....	By	803a
Algol Gray B.....	By	834	Alizarin Blue B.....	M	803a
Algol Gray BB.....	By	834	Alizarin Blue B.....	Q	803a
Algol Green B.....	By	847	Alizarin Blue BB.....	M	803a
Algol Olive R.....	By	833	Alizarin Blue BR.....	By	803a
Algol Orange R.....	By	824	Alizarin Blue BR 3 G.....	By	803a
Algol Pink R.....	By	818	Alizarin Blue DH.....	M	803a
Algol Red B.....	By	825	Alizarin Blue DH 6 GM.....	M	803a
Algol Red FF.....	By	819	Alizarin Blue DN.....	M	803a
Algol Red 2 G.....	By	816a	Alizarin Blue D 2 R.....	M	803a
Algol Red 3 G.....	By	816a	Alizarin Blue D 4 R.....	M	803a
Algol Red 5 G.....	By	816	Alizarin Blue GR.....	M	803a
Algol Red R.....	By	819	Alizarin Blue GW.....	M	803a
Algol Scarlet G.....	By	815	Alizarin Blue GWDS.....	By	803a
Algol Violet B.....	By	823	Alizarin Blue HJ.....	By	803a
Algol Yellow 3 G.....	By	811	Alizarin Blue IIX.....	By	803a
Algol Yellow 6 GL.....	By	811a	Alizarin Blue JR.....	By	803a
Algol Yellow R.....	By	817	Alizarin Blue NFA.....	By	803a
Algol Yellow WF.....	By	814	Alizarin Blue NEN.....	By	803a
Alizadine Black.....	H	U744	Alizarin Blue NS.....	By	803a
Alizadine Black M.....	H	U744	Alizarin Blue NSG.....	By	803a
Alizadine Deep Brown 3 R.....	H	U745	Alizarin Blue SAE.....	By	804
Alizadine Orange M.....	H	U746	Alizarin Blue SAP.....	By	804
Alizadine Yellow Y.....	H	U748	Alizarin Blue SAWSA.....	By	804
Alizarin paste.....	Br. Aliz.	778	Alizarin Blue SB.....	M	804a
Alizarin powder.....	Co.		Alizarin Blue SRM.....	M	804
Alizarin.....	Co.	778	Alizarin Blue WX.....	B	803
Alizarin 11 AB.....	By	780	Alizarin Blue 942.....	M	804a
Alizarin D 1140.....	M	778	Alizarin Blue (violet shade).....	S	803a
Alizarin D 1149.....	M	778	Alizarin Blue (violet shade) P.....	S	803a
Alizarin D 1399.....	M	778	Alizarin Blue Black B.....	C	774a
Alizarin DCR.....	M	806a	Alizarin Blue Black B.....	CV	862
Alizarin GD.....	B	784	Alizarin Blue Black B.....	M	862
Alizarin GGX.....	By	785a	Alizarin Blue Black 3 B.....	Q	862
Alizarin GI.....	B	785a	Alizarin Blue Black 3 B.....	By	862
Alizarin I.....	M	778	Alizarin Blue Black 3 B.....	M	862
Alizarin IB.....	By	778	Alizarin Blue Black GT.....	B	774a
Alizarin IB.....	M	778	Alizarin Bordeaux B, BD.....	By	787
Alizarin IP.....	By	778	Alizarin Brown.....	M	782
Alizarin IT.....	M	778	Alizarin Brown B.....	M	782
Alizarin IWS.....	M	780	Alizarin Brown D 3 GO.....	M	782
Alizarin RG.....	B	785	Alizarin Brown DR.....	M	782
Alizarin RVT.....	By	784a	Alizarin Brown N.....	M	782
Alizarin S.....	By	784b	Alizarin Brown O.....	Q	782
Alizarin SDG.....	M	785	Alizarin Brown RE.....	M	782
Alizarin SX.....	B	784	Alizarin Claret R.....	M	U404
Alizarin V 1.....	B	778	Alizarin Claret Red DB.....	M	U405
Alizarin V 2 A.....	B	778	Alizarin Claret Red DG.....	M	U406
Alizarin W.....	By	730	Alizarin Chrome Blue T.....	S	803b
Alizarin 11 X.....	By	778	Alizarin Chrome Brown DG.....	M	U402
Alizarin XGP.....	By	785a	Alizarin Chrome Brown DR.....	M	U403
			Alizarin Crimson DB.....	M	U407
			Alizarin Crimson DG.....	M	U408

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Alizarin Cyanine G.....	By	799	Alizarin Violet BL.....	Q	599
Alizarin Cyanine R.....	By	788	Alizarin Violet DH.....	M	599
Alizarin Dark Blue DR.....	M	804b	Alizarin Viridine DG, FF.....	By	854
Alizarin Dark Blue S.....	M	804b	Alizarin Violet N.....	M	599
Alizarin Dark Green W.....	B	775	Alizarin Yellow A.....	B	770
Alizarin Direct Blue B.....	M	851	Alizarin Yellow C.....	B	769
Alizarin Direct Blue EB.....	M	851a	Alizarin Yellow CY.....	By	48
Alizarin Direct Blue ESB.....	M	851a	Alizarin Yellow DGC.....	M	48
Alizarin Direct Blue ESR.....	M	851a	Alizarin Yellow D 3 G.....	M	48
Alizarin Direct Cyanine FA.....	M	U409	Alizarin Yellow DOG.....	M	48
Alizarin Direct Green G.....	M	865	Alizarin Yellow DOO.....	M	48
Alizarin Direct Yellow DR.....	M	U410	Alizarin Yellow DR.....	M	48
Alizarin Direct Yellow DS.....	M	U411	Alizarin Yellow FF.....	(WB)	48
Alizarin Fast Blue DGL.....	M	U412	Alizarin Yellow FS.....	DH	482
Alizarin Fast Brown DB.....	M	U413	Alizarin Yellow G.....	S	48
Alizarin Fast Brown D 3 R.....	M	U414	Alizarin Yellow GG.....	By	48
Alizarin Fast Brown 3 R.....	M	U415	Alizarin Yellow GG.....	I	48
Alizarin Fast Gray DBL.....	M	U416	Alizarin Yellow GG.....	M	48
Alizarin Fast Orange DO.....	M	U417	Alizarin Yellow 5 G.....	I	48
Alizarin Fast Red D 244.....	M	U418	Alizarin Yellow 5 G.....	M	48
Alizarin Fast Scarlet D 6 BS.....	M	U419	Alizarin Yellow GGW.....	M	48
Alizarin Fast Scarlet D 8 BS.....	M	U420	Alizarin Yellow O.....	M	58a
Alizarin Garnet.....	AW	797	Alizarin Yellow R.....	(Cons CCCc)	58
Alizarin Garnet R.....	M	797	Alizarin Yellow R.....	(Hub)	58
Alizarin Gray.....	C	774d	Alizarin Yellow 3 RN.....	M	58
Alizarin Gray G.....	M	U421	Alizarin Yellow RW.....	M	58
Alizarin Green B.....	WD	657	Alkali Black.....	WD	U538
Alizarin Green BB.....	M	805	Alkali Blue.....	(ByCo)	536
Alizarin Green C.....	By	808a	Alkali Blue.....	(H&M)	536
Alizarin Green CE.....	By	808a	Alkali Blue.....	Q	536
Alizarin Green CG.....	By	808a	Alkali Blues, green shades.....	(Sch)	536
Alizarin Green CK.....	By	808a	Alkali Blues, red shades.....	(Sch)	536
Alizarin Green DGN.....	M	805	Alkali Blue (V. M.).....	C	536
Alizarin Green DMA.....	M	805	Alkali Blue (for printing ink).....	G	536
Alizarin Green G.....	WD	656	Alkali Blue (for printing ink).....	tM	536
Alizarin Green 3 G.....	M	805	Alkali Blue III.....	A	536
Alizarin Green S.....	B	808	Alkali Blue IV A.....	M	536
Alizarin Green S.....	M	805	Alkali Blue 2 AS.....	M	536
Alizarin Green SP 4.....	By	808a	Alkali Blue AWG.....	M	536
Alizarin Green SW.....	M	805	Alkali Blue AWR.....	M	536
Alizarin Green V.....	By	808a	Alkali Blue AWRG.....	M	536
Alizarin Green VD.....	By	808a	Alkali Blue 2 B.....	A	536
Alizarin V 3 W.....	B	778	Alkali Blue BB.....	B	536
Alizarin Green WB.....	M	805	Alkali Blue 2 B.....	M	536
Alizarin Green X.....	B	808	Alkali Blue 2 B.....	tM	536
Alizarin Indigo B.....	By	894	Alkali Blue 3 B.....	S	536
Alizarin Indigo G.....	By	893	Alkali Blue 3 B.....	tM	536
Alizarin Indigo 3 R.....	By	895	Alkali Blue 4 B.....	I	536
Alizarin Indigo Blue S.....	B	809	Alkali Blue 4 B.....	M	536
Alizarin Indigo Green B.....	By	894a	Alkali Blue 5 BA.....	B	536
Alizarin Indigo Violet B.....	By	894b	Alkali Blue BK 2.....	K	536
Alizarin Isol D, R.....	---	852	Alkali Blue 5 BL.....	B	536
Alizarin Lake.....	Q	U783	Alkali Blue 7 BOO.....	GrE	536
Alizarin Light Red D 8 BW.....	M	U422	Alkali Blue D.....	A	535
Alizarin Milling Black 8 B.....	AW	774c	Alkali Blue H 5 BKOOO.....	GrE	536
Alizarin Maroon W.....	B	798	Alkali Blue HEOOO.....	GrE	536
Alizarin Orange.....	M	779	Alkali Blue HHRROOO.....	GrE	536
Alizarin Orange A.....	B	779	Alkali Blue I.....	A	536
Alizarin Orange DG.....	M	779	Alkali Blue MN.....	A	536
Alizarin Orange DN.....	M	779	Alkali Blue N.....	B	536
Alizarin Orange GR.....	M	779	Alkali Blue R.....	I	536
Alizarin Orange R.....	By	779	Alkali Blue 3 R.....	tM	536
Alizarin Pure Blue B.....	By	855	Alkali Blue 5 R.....	tM	536
Alizarin Pure Blue DPH.....	M	U423	Alkali Blue 6 R.....	tM	536
Alizarin Pure Yellow DHS.....	M	U424	Alkali Blue RM.....	M	536
Alizarin Red (yellow).....	M	780a	Alkali Blue RRM.....	M	535
Alizarin Red D 4 B.....	M	780a	Alkali Blue 2.....	M	536
Alizarin Red D 10 B.....	M	780a	Alkali Blue 1756.....	K	536
Alizarin Red DG.....	M	780a	Alkali Blue 1757.....	K	536
Alizarin Red G.....	M	780a	Alkali Blue 11408.....	B	536
Alizarin Red IWS.....	M	780	Alkali Brilliant Blue G.....	WD	536a
Alizarin Red SWB.....	B	780	Alkali Brown.....	WD	190
Alizarin Red SWBB.....	B	780	Alkali Dark Brown G, V.....	WD	331
Alizarin Red SWR.....	B	780	Alkali Fast Green 3 G.....	By	U213
Alizarin Red WB.....	B	780	Alkali Fast Yellow.....	WD	199a
Alizarin Red 3 WS.....	M	786	Alkali Rubine.....	WD	U539
Alizarin Rose GWG.....	Q	U784	Alkali Violet.....	K	532
Alizarin Rubinol 5 G.....	By	856a	Alkali Violet AS.....	M	532
Alizarin Rubinol R.....	By	856a	Alkali Violet 6 BO.....	B	532
Alizarin Saphrol B.....	By	858	Alkali Violet LR.....	By	U214
Alizarin Sky Blue B.....	By	804c	Alkali Violet 421.....	K	532
Alizarin Uranol 2 B.....	By	U211	Alkali Yellow.....	AW	199
Alizarin Uranol R.....	By	U212	Alkali Yellow R.....	WD	350
Alizarin Violet (V. M.).....	C	599			

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Alpha Black 6 BN.....	CV	U716	Anthracene Chromate Brown (V. M.)	C	A318
Alpha Black JC.....	CV	U717	Anthracene Chromate Yellow.....	C	A322
Alpha Chrome Blue A.....	CV	U718	Anthracene Chrome Blue (V. M.)	C	A313
Alpha Chrome Brown 6 GA.....	CV	U719	Anthracene Chrome Black (V. M.)	C	185
Alpha Chrome Brown N.....	CV	U720	Anthracene Chrome Brown.....	C	A323
Alpha Chrome Green 6 B.....	CV	U721	Anthracene Chrome Green.....	C	A325
Alpha Chrome Orange RK.....	CV	U722	Anthracene Chrome Red (V. M.)	C	A326
Alpha Chrome Red 3 B.....	CV	U723	Anthracene Dark Blue W.....	B	790b
Alpha Chrome Yellow C.....	CV	U724	Anthracene Direct Green.....	C	U274
Alphanol Black (V. M.).....	C	A303	Anthracene Red.....	By	355
Alphanol Blue (V. M.).....	C	A308	Anthracene Red.....	I	355
Amaranth.....	(CDCo)	168	Anthracene Red WB.....	B	355
Amaranth.....	(CDCo)	168	Anthracene Red 10430.....	I	355
Amaranth B.....	C	168	Anthracene Violet.....	I	599
Amaranth D.....	BK	168	Anthracene Yellow.....	By	773
Amaranth DE.....	B	U96	Anthracene Yellow (V. M.).....	C	177a
Amaranth SA.....	tM	168	Anthracene Yellow C.....	By	294
Amethyst Violet.....	K	686	Anthracene Yellow C.....	BK	294
Amido Acid Black B.....	A	220a	Anthracene Yellow G.....	I	773a
Amido Acid Black 4 B.....	A	220a	Anthracene Yellow RN.....	M	58b
Amido Acid Black BS.....	A	220a	Anthracene Yellow 3 RN.....	M	58b
Amido Azo Black.....	M	A413	Anthrachrome Red A.....	L	A501
Amido Black A 2 G.....	M	217f	Anthracite Black.....		267
Amido Black 10 B.....	M	217	Anthracyl Blue SWR.....	CV	A726
Amido Black 4024.....	M	217f	Anthracyl Chrome Blue 2 B.....	tM	A524
Amido Blue B.....	M	U425	Anthracyl Chrome Blue D.....	tM	A525
Amido Blue GGR.....	M	U426	Anthracyl Chrome Brown D.....	WD	154
Amido Dark Bottle Green B.....	M	U427	Anthracyl Chrome Green D.....	WD	91
Amido Gallamine Blue.....	DH	638	Anthraflavone G.....	B	759
Amido Naphthol Black 4 B.....	M	A414	Anthranol Green B.....	WD	U540
Amido Naphthol Black RK.....	M	A415	Anthraquinone Black.....	B	749
Amido Naphthol Red 2 B.....	M	66a	Anthraquinone Blue SR.....	B	861
Amido Naphthol Red 6 B.....	M	66	Anthraquinone Blue Green BXO.....	B	863
Amido Naphthol Red G.....	M	42	Anthraquinone Green GXNO.....	B	864
Amido Red BL.....	M	A416	Anthraquinone Violet.....	B	853
Amido Yellow E.....	M	A417	Anthrarubine 395.....	K	U305
Amido-azo-benzene.....		31	Apollo Red B.....	G	54
Amido-azo-benzene.....	(CDCo)	31	Apollo Red G.....	G	54
Amido-azo-toluene.....	(CDCo)	68	Archil Substitute V.....	P	52
Amine Black 4 B.....	A	U64	Archil Substitute 3 VN.....	P	53
Amine Black 10 B.....	A	U65	Artificial Silk Black R.....	By	U216
Amine Black 4 BM.....	A	U66	Artificial Silk Black G.....	By	U215
Amine Black S 4 B.....	A	U67	Auracine G.....	By	609a
Amine Black SL.....	A	U68	Auramine.....	AW	493
Amine Black Green B.....	A	U69	Auramine.....	B	493
Amine Red.....	A	U70	Auramine.....	By	493
Aniline Black 15908.....	B	922	Auramine.....	H	493
Aniline Blue B.....	tM	521	Auramine.....	M	493
Aniline Blue 2 B.....	A	521	Auramine.....	S	493
Aniline Blue 3 B.....	tM	521	Auramine.....	tM	493
Aniline Blue RN.....	tM	521	Auramine G.....	I	494
Aniline Blue 6416.....	CG	521	Auramine G.....	tM	494
Aniline Red B.....	I	512	Auramine N.....	S	493
Aniline Yellow.....	B	6	Auramine O.....	By	493
Aniline Yellow.....	Q	6	Auramine OO.....	G	493
Anthosine B.....	B	U97	Auramine OO 3.....	K	493
Anthosine 3 B.....	B	U98	Auramine OO 4.....	K	493
Anthosine 5 B.....	B	U99	Auramine OOD.....	B	493
Anthracene Acid Black (V. M.).....	C	277	Auramine OOD.....	K	493
Anthracene Acid Blue (V. M.).....	C	A311	Auramine OOP.....	I	493
Anthracene Acid Brown B.....	M	492	Auramine OEA.....	B	493
Anthracene Acid Brown G.....	C	U650	Auramine 23112.....	K	493
Anthracene Acid Green.....	G	A312	Auramine base.....	K	493
Anthracene Black FF.....	C	221	Aurine.....	B	555
Anthracene Blue 3 G.....	M	800a	Auro Flavine KR.....	M	609c
Anthracene Blue SWG.....	B	790a	Auronal Black 3 A.....	G	722a
Anthracene Blue SWGG.....	B	790a	Auronal Black 4 A.....	G	722a
Anthracene Blue SWR.....	B	790a	Auronal Black 4 A.....	tM	722a
Anthracene Blue WB.....	B	800	Auronal Black B.....	tM	727
Anthracene Blue WG.....	B	800	Auronal Black 4 G.....	tM	722a
Anthracene Blue WGG.....	B	801	Auronal Black 5 G.....	tM	722a
Anthracene Blue WN.....	B	790a	Auronal Black N 2 R.....	tM	722
Anthracene Blue WR.....	B	789	Auronal Black 3.....	tM	722a
Anthracene Blue W 3 R.....	B	789	Auronal Blue D.....	tM	8137
Anthracene Blue new WG.....	B	802	Auronal Green TA.....	tM	8138
Anthracene Blue Black (V. M.).....	C	181a	Auronal Orange R.....	tM	8140
Anthracene Brown.....	B	782	Auronal Orange S.....	tM	8139
Anthracene Brown G.....	By	782a	Aurophosphine G.....	A	606a
Anthracene Brown R.....	By	782a	Aurophosphine 4 G.....	A	606a
Anthracene Brown RH.....	H	782	Austrian Black.....	P	U785
Anthracene Brown VV.....	By	782a	Autogene Black.....	P	732
Anthracene Brown SW.....	B	782	Autogene Black EEB.....	P	723

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Autol Red BL	B	56	Azo Magenta RS	B	A68
Autol Red ILP Paste	B	106	Azo Mauve B	GrE	382
Azarine S	M	86	Azo Marine Black	C	A332
Azidine Blue B	CJ	410	Azo Milling Yellow 5 G	GrE	A437
Azidine Blue 3 B	CJ	391	Azo Orange Rubine	M	A423
Azidine Blue B.A.L.G.	CJ	410	Azo Orseille 2 B	C	A334
Azidine Blue BAN	CJ	410	Azo Orseille R	A	44
Azidine Blue BX	CJ	386	Azo Orselline	FA	312a
Azidine Blue 24574	CJ	410	Azo Phosphine GO	M	60
Azidine Bordeaux G	CJ	313	Azo Red A	C	165
Azidine Dark Brown	CJ	A454	Azo Rhodine 2 B	S	A711
Azidine Fast Orange T.S.	CJ	A455	Azo Rubine	(Sch)	163
Azidine Fast Scarlet 4 BS	CJ	281	Azo Rubine (V. M.)	C	163
Azidine Fast Scarlet 7 BS	CJ	282	Azo Rubine A	tM	163
Azidine Fast Scarlet E 4 BS	CJ	A456	Azo Rubine S	GrE	163
Azidine Fast Scarlet GGS	CJ	280	Azo Rubine S	S	168
Azidine Orange G	CJ	392	Azo Rubine SG	A	163
Azidine Sky Blue FF	CJ	424	Azo Rubine WB	(WB)	163
Azidine Yellow CP	CJ	304	Azo Turkish Red	GrE	115
Azidine Wool Blue B	CJ	420	Azo Violet	By	407
Azo Acid Black B 15	M	A418	Azo Wool Black (V. M.)	C	A335
Azo Acid Black 3 BL	M	A419	Azo Wool Blue (V. M.)	C	61
Azo Acid Black R	M	A420	Azo Wool Violet (V. M.)	C	A336
Azo Acid Black TL II	M	A421	Azo Wool Violet 415	K	A391
Azo Acid Blue B	K	63	Azo Yellow	K	141
Azo Acid Blue B	M	63	Azo Yellow	M	141
Azo Acid Blue B	S	63	Azo Yellow	Q	141
Azo Acid Blue 2 G	By	63a	Azo Yellow	(Sch)	141
Azo Acid Brown 2049	By	A151	Azo Yellow 3 A	tM	141c
Azo Acid Magenta G	M	64b	Azo Yellow 3 AN	tM	141c
Azo Acid Red 5 B	M	64a	Azo Yellow A 5 W	(Sch)	141
Azo Acid Red BA	M	64	Azo Yellow 3 G	tM	141
Azo Acid Rubine	WD	163	Azo Yellow 3 Y	tM	141c
Azo Acid Rubine (V. M.)	K	163	Azogallene	G	62
Azo Acid Violet A 2 B	By	229	Azomine Black FF	CV	A727
Azo Acid Violet AL	By	229	Azomine Fast Yellow A.I.	CV	A728
Azo Acid Yellow	A	141	Azomine Milling Black N	CV	A729
Azo Alizarin Black I	DH	292	Azomine Yellow G	Q	U786
Azo Alizarin Bordeaux W	DH	291	Azomine Yellow R	Q	U787
Azo Alizarin Brown I	By	A152	Azophor Black S	M	408
Azo Black O	M	A422	Azophor Orange MN	M	46
Azo Black Blue	GrE	381	Azorubine	(CDCo)	163
Azo Blue	By	377	Azotol C	C	239
Azo Bordeaux	(Sch)	112	Azure Blue	K	U306
Azo Brown V	M	160a	Azure Blue A	K	U306
Azo Cardinal G	A	50	Azure Blue ASI	K	U306
Azo Carmine	B	673	Azurine B	I	520a
Azo Carmine G	B	672	Azure Blue O	K	U306
Azo Carmine GX	B	672	Azure Blue VS	K	U306
Azo Cerise M	K	A389	Basic Black TES	K	U307
Azo Cerise 1618	K	A389	Basic Blue BA	AW	U552
Azo Chrome Blue R	K	163b	Basle Blue R	DH	677
Azo Chromine	G	84	Basic Gray	Q	U788
Azo Cocine 2 R	A	77	Basic Kraft Brown Y 2	B	U100
Azo Coralline	WD	65	Basic Violet	Q	U789
Azo Corinth	GrE	481	Benzamine Brown 3 G	WD	476a
Azo Crimson S	By	A153	Benzamine Brown 3 GO	WD	476
Azo Eosine	By	94	Benzamine Pure Blue	WD	426
Azo Fast Blue (V. M.)	C	A329	Benzazurine (V. M.)	K	410
Azo Fast Violet	C	A332	Benzazurine G	A	410
Azo Flavine CX	B	141a	Benzazurine G	By	410
Azo Flavine FF	B	141a	Benzazurine G	CG	410
Azo Flavine 3 G	B	141a	Benzazurine G	S	410
Azo Flavine GX	B	141a	Benzazurine 3 G	By	411
Azo Flavine 3 R	B	141a	Benzazurine R	By	410
Azo Flavine 3 R	tM	140	Benzazurine 3 R	GrE	385
Azo Flavine 2 RNH	B	141a	Benzazurine WB	(WB)	410
Azo Flavine RS	B	140	Benzidine Puce	M	318
Azo Flavine RX	B	141a	Benzine Black	C	U275
Azo Flavine S	B	141	Benzine Blue	C	U276
Azo Flavine SGR	B	141a	Benzo Azo Red B	WD	A526
Azo Fuchsine B	By	71	Benzo Black Blue G	By	459
Azo Fuchsine 6 B	By	147	Benzo Black P Blue 5 G	By	460
Azo Fuchsine G	By	146	Benzo P Black Blue R	By	450
Azo Fuchsine 4 G	By	146	Benzo Blue 2 B	By	337
Azo Fuchsine GN	By	147	Benzo Blue 3 B	By	391
Azo Green	By	510	Benzo Blue BX	Py	386
Azo Indigine 6 B	AW	A537	Penzo Blue RW	By	419
Azo Indigine S	AW	A538	Penzo Bor 'eaux 6 B	By	A154
Azo Indigine 419	K	A330	Penzo Prilliant Blue 2 GDN	BK	A442
Azo Indigine 420	K	A330	Benzo Bronze F	Py	A155
Azo Magenta 6 BX	B	A67	Penzo Bronze GC	Py	A156
Azo Magenta G	CV	146	Benzo Brown B	By	487



Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Benzo Brown BX.....	By	490	Benzo Sky Blue.....	By	426
Benzo Brown D 3 G.....	By	485a	Benzo Violet O.....	By	326
Benzo Brown G.....	By	485	Benzo Violet R.....	By	326a
Benzo Brown 5 G.....	By	485a	Benzoilavine O.....	GrE	606
Benzo Brown 2 GC.....	By	485a	Benzoform Blue B.....	By	A196
Benzo Brown 3 GC.....	By	485a	Benzoform Brown R.....	By	A197
Benzo Brown MC.....	By	485a	Benzoform Orange G.....	A	U71
Benzo Brown NBX.....	By	485a	Benzoform Orange G.....	By	A198
Benzo Brown RC.....	By	485a	Benzoform Red G.....	A	U72
Benzo Brown TR.....	By	485a	Benzoform Red 2.....	By	A199
Benzo Chrome Black Blue B.....	By	A157	Benzoform Red 2 GF.....	By	A200
Benzo Chrome Brown B.....	By	A158	Benzoform Scarlet B.....	By	A201
Benzo Chrome Brown BS.....	By	A159	Benzoform Yellow R.....	By	A202
Benzo Chrome Brown G.....	By	A160	Benzoil Blue 5 GN.....	BK	410
Benzo Chrome Brown 5 G.....	By	A161	Benzoil Brown C.....	BK	477
Benzo Chrome Brown R.....	By	A162	Benzoilpurpurine.....	AW	365a
Benzo Copper Blue B.....	By	A163	Benzoilpurpurine.....	H	365
Benzo Copper Blue 2 B.....	By	A164	Benzoilpurpurine.....	I	365a
Benzo Cyanine B.....	By	390	Benzoilpurpurine AM.....	By	365a
Benzo Cyanine 3 B.....	By	425	Benzoilpurpurine B.....	A	365
Benzo Cyanine R.....	By	336	Benzoilpurpurine B.....	tM	365
Benzo Dark Brown.....	By	A165	Benzoilpurpurine 4 B.....	A	363
Benzo Dark Green B.....	By	A166	Benzoilpurpurine 4 B.....	AW	363
Benzo Dark Green GG.....	By	A167	Benzoilpurpurine 4 B.....	By	363
Benzo Deep Black SS.....	By	A168	Benzoilpurpurine 4 B.....	G	363
Benzo Fast Black.....	G	A611	Benzoilpurpurine 4 B.....	Q	363
Benzo Fast Black L.....	By	A169	Benzoilpurpurine 4 B.....	tM	363
Benzo Fast Blue B.....	By	456	Benzoilpurpurine 6 B.....	By	364
Benzo Fast Blue BN.....	By	456	Benzoilpurpurine 10 B.....	A	405
Benzo Fast Blue FRL.....	By	456a	Benzoilpurpurine 10 B.....	AW	405
Benzo Fast Blue 2 GL.....	By	456a	Benzoilpurpurine 10 B.....	By	405
Benzo Fast Blue 4 GL.....	By	456a	Benzoilpurpurine 10 B.....	CG	405
Benzo Fast Blue 2 L.....	By	456a	Benzoilpurpurine 10 B.....	G	405
Benzo Fast Blue R.....	A	451	Benzoilpurpurine 10 B.....	GrE	405
Benzo Fast Bordeaux 6 BL.....	By	A170	Benzoilpurpurine 10 B.....	I	405
Benzo Fast Brown 3 GL.....	By	A171	Benzoilpurpurine 10 B.....	S	405
Benzo Fast Brown RL.....	By	A172	Benzoilpurpurine 10 B.....	tM	405
Benzo Fast Eosine BL.....	By	A173	Benzoilpurpurine 4 BM.....	A	363
Benzo Fast Gray.....	By	A174	Benzoilpurpurine 4 BN.....	BK	363
Benzo Fast Gray BL.....	By	A175	Benzoilpurpurine 4 BN.....	Q	363
Benzo Fast Heliotrope BL.....	By	A176	Benzoilpurpurine 4 BN.....	GrE	363
Benzo Fast Heliotrope 4 BL.....	By	A177	Benzoilpurpurine 4 BX.....	Q	363
Benzo Fast Heliotrope 5 RH.....	By	A178	Benzoil Link.....	P	104
Benzo Fast Heliotrope 2 RL.....	By	A179	Benzoil Black B.....	I	A661
Benzo Fast Orange 2 RL.....	By	A180	Benzoil Blue B.....	I	U651
Benzo Fast Orange S.....	By	A181	Benzoil Bordeaux B.....	I	U652
Benzo Fast Orange WS.....	By	340a	Benzoil Bordeaux 17619.....	I	U652
Benzo Fast Pink 2 BL.....	By	297	Benzoil Green B.....	I	503
Benzo Fast Red 8 BL.....	By	332	Benzoil Red.....	I	A662
Benzo Fast Red D.....	By	332	Benzoil Red 4 B.....	I	517
Benzo Fast Red FC.....	By	343	Benzoil Violet 6 B.....	I	517
Benzo Fast Red GL.....	By	332	Biebrich Acid Blue G.....	K	U308
Benzo Fast Red L.....	By	332	Biebrich Acid Blue V.....	K	U309
Benzo Fast Rubine BL.....	By	A183	Biebrich Acid Violet R.....	K	A392
Benzo Fast Scarlet 4 BS.....	By	279	Biebrich Patent Black.....	K	278
Benzo Fast Scarlet 5 BS.....	By	279	Bismarck Acid Brown.....	By	A205
Benzo Fast Scarlet 8 BS.....	By	279	Bismarck Brown.....	A	283
Benzo Fast Scarlet GS.....	By	279	Bismarck Brown.....	(ByCo)	283
Benzo Fast Violet NC.....	By	327	Bismarck Brown.....	(CDCo)	283
Benzo Fast Violet R.....	By	327a	Bismarck Brown.....	H	283
Benzo Fast Yellow 4 GL.....	By	206a	Bismarck Brown.....	(H&M)	283
Benzo Fast Yellow 5 GL.....	By	206	Bismarck Brown (V. M.).....	C	283
Benzo Fast Yellow RL.....	By	206a	Bismarck Brown EL.....	I	283
Benzo Gray S.....	By	447	Bismarck Brown G.....	I	283
Benzo Green BB.....	By	A184	Bismarck Brown R.....	CV	284
Benzo Green C.....	By	A185	Bismarck Brown R.....	I	284
Benzo Green FF.....	By	A186	Bismarck Brown 2 R.....	tM	284
Benzo Green FFG.....	By	A187	Bismarck Brown 2 RV.....	tM	284
Benzo Green G.....	By	A188	Bismarck Brown Y.....	(Sch)	283
Benzo Indigo Blue.....	By	452	Bismarck Brown 53.....	(Sch)	283
Benzo New Blue 2 B.....	By	379	Bismarck Brown 1568.....	CV	283
Benzo New Blue 5 B.....	By	379	Black (V. M.).....	CJ	U494
Benzo New Red 4 B.....	By	A189	Black (V. M.).....	H	U749
Benzo Olive.....	By	446	Black AJ.....	P	700a
Benzo Orange R.....	By	340	Black BH.....	AW	U553
Benzo Pure Yellow FF.....	By	A190	Black CBR.....	P	698
Benzo Red 10 B.....	By	A191	Black CE.....	H	U749
Benzo Red 12 B.....	By	A192	Black C 2 N.....	P	698
Benzo Rhoduline Red B.....	By	A203	Black DX.....	H	U749
Benzo Rhoduline Red 3 B.....	By	A204	Black E.....	B	U101
Benzo Rubine HW.....	By	A193	Black HB.....	AW	U554
Benzo Rubine SC.....	By	A194	Black M.....	H	U749
Benzo Scarlet BC.....	By	A195			

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Black N.....	H	U749	Brilliant Azure Blue V8.....	K	U313
Black NSA.....	P	700a	Brilliant Aurine B.....	By	416a
Black R W.....	H	U749	Brilliant Aurine 5 G.....	By	416
Black X.....	H	U749	Brilliant Aurine R.....	By	416a
Black 31604.....	P	700a	Brilliant Aurine 5 R.....	By	416a
Black soluble in fats.....	G	U605	Brilliant Benzo Blue 6 B.....	By	424
Black soluble in oil.....	C	U277	Brilliant Benzo Green B.....	By	A207
Black Base BB.....	B	U102	Brilliant Benzo Violet B.....	By	A208
Black Base S.....	B	U103	Brilliant Benzo Violet 2 R.....	By	A209
Black Black O.....	M	U428	Brilliant Benzo Fast Violet 2 RL.....	By	A206
Blue (V. M.).....	H	U750	Brilliant Benzo Fast Violet BL.....	By	A206a
Blue A S.....	S	U685	Brilliant Black B.....	B	272
Blue 3 BB.....	GrE	U502	Brilliant Black 3 B.....	B	272
Blue BS.....	P	539	Brilliant Black G.....	B	272
Blue 5 BS.....	tM	U524	Brilliant Blue A.....	CV	U725
Blue BS 3 BB.....	GrE	U503	Brilliant Blue G.....	S	U699
Blue BSJ.....	GrE	U504	Brilliant Blue GG.....	CV	U726
Blue BSR.....	GrE	U505	Brilliant Blue 217.....	Q	U793
Blue CA.....	I	U653	Brilliant Blue 286.....	Q	U794
Blue CV.....	AW	U555	Brilliant Bordeaux SD.....	A	A1
Blue DB.....	Q	U790	Brilliant Brown 205.....	Q	U795
Blue DR.....	H	U791	Brilliant Carmine CL.....	B	U106
Blue DS.....	H	U750	Brilliant Carmine GG.....	B	U107
Blue JB.....	S	U278	Brilliant Carmine I.....	B	U108
Blue N.....	C	U696	Brilliant Chrome Violet BD.....	By	549a
Blue PCN.....	DH	697	Brilliant Cloth Blue.....	K	189a
Blue PCV.....	G	U606	Brilliant Cochineal.....	C	81
Blue RR.....	GrE	U506	Brilliant Congo G.....	A	316
Blue 3 R.....	tM	U525	Brilliant Congo R.....	A	370
Blue RS.....	P	537b	Brilliant Congo R.....	By	370
Blue 25.....	S	U697	Brilliant Congo R.....	S	370
Blue 26.....	S	U698	Brilliant Congo Blue B.....	A	U73
Blue 214.....	B	U104	Brilliant Congo Blue 5 R.....	A	U74
Blue 16519.....	L	U514	Brilliant Congo Violet R.....	A	U75
Blue 27071.....	By	U217	Brilliant Copper Blue BW.....	A	U76
Blue for silk RN.....	P	537b	Brilliant Copper Blue GW.....	A	U77
Blue (greenish) spirit soluble.....	M	521	Brilliant Cotton Blue N.....	By	538
Blue Black B.....	M	269b	Brilliant Croceine (V. M.).....	C	227
Blue Black N.....	K	215	Brilliant Croceine 3 B.....	By	227
Blue Black O.....	M	269b	Brilliant Croceine 9 B.....	C	270
Blue Black for Half Wool G.....	By	U218	Brilliant Croceine 3 BA.....	By	227
Blue Crystals 3035.....	K	U309	Brilliant Croceine MD.....	GrE	227
Blue Residue BW 6 M.....	P	U310	Brilliant Croceine NZ.....	M	227
Boma Black BH.....	AW	U556	Brilliant Crimson.....	M	163
Boma Black BHX.....	AW	U557	Brilliant Crimson N.....	M	163
Boma Pink.....	AW	U558	Brilliant Delphine Blue B.....	K	U314
Boma Yellow BBF.....	AW	U559	Brilliant Dianil Blue 6 G.....	M	541
Bordeaux extra.....	(Sch)	320	Brilliant Diazine Blue 1230.....	K	U315
Bordeaux B.....	A	112	Brilliant Double Scarlet.....	BK	176b
Bordeaux.....	AW	168	Brilliant Fast Black.....	I	U654
Bordeaux B.....	BK	112	Brilliant Fast Blue.....	AW	A539
Bordeaux B.....	(CDCo)	112	Brilliant Fast Blue B.....	By	A210
Bordeaux B LA.....	tM	320	Brilliant Fast Blue 3 BX.....	By	A211
Bordeaux BR.....	BK	112	Brilliant Fast Blue 2 G.....	By	A212
Bordeaux BX.....	By	237	Brilliant Fast Blue 4 G.....	By	A213
Bordeaux COV.....	A	320	Brilliant Fast Red G.....	B	162
Bordeaux G.....	By	254	Brilliant Fast Red P.....	By	A214
Bordeaux G.....	BK	112	Brilliant Geranine B.....	By	118
Bordeaux R.....	BK	112	Brilliant Glacier Blue.....	I	501
Bordeaux R.....	K	112	Brilliant Green.....	AW	499
Bordeaux S.....	A	168	Brilliant Green.....	By	499
Bordeaux 265.....	Q	112b	Brilliant Green.....	K	499
Bordeaux 5005.....	BK	112	Brilliant Green.....	M	499
Bordeaux Black.....	Q	U792	Brilliant Green.....	tM	499
Brilliant Acid Blue A.....	A	545	Brilliant Green B.....	tM	495
Brilliant Acid Blue A.....	By	545	Brilliant Green BN.....	tM	499
Brilliant Acid Blue B.....	By	545c	Brilliant Green D.....	C	499
Brilliant Acid Blue FF.....	By	545c	Brilliant Green PND.....	GrE	499
Brilliant Acid Blue L.....	By	545c	Brilliant Green S.....	CJ	499
Brilliant Acid Blue V.....	By	543	Brilliant Hessian Purple.....	L	302
Brilliant Acid Blue 25601.....	S	545c	Brilliant Indigo BD.....	B	885
Brilliant Acid Carmine B.....	GrE	66b	Brilliant Indigo BBD.....	B	884
Brilliant Acid Carmine BOO.....	GrE	66b	Brilliant Indigo 4 G.....	B	887
Brilliant Acid Green 6 B.....	By	503	Brilliant Indigo GD.....	B	886
Brilliant Acid Red G.....	K	U312	Brilliant Indigo 4 GD.....	B	886
Brilliant Alizarin Blue D 3 G.....	M	667	Brilliant Lake Red R.....	M	45
Brilliant Alizarin Blue D 6 G.....	M	667	Brilliant Lanafuchsin (V. M.).....	C	U280
Brilliant Alizarin Blue DRI.....	M	667	Brilliant Milling Blue (V. M.).....	C	U281
Brilliant Alizarin Blue B.....	By	667	Brilliant Milling Blue B.....	K	U316
Brilliant Alizarin Blue R.....	CR	667	Brilliant Milling Green B.....	C	508
Brilliant Alizarin Blue 3 R.....	By	667	Brilliant Naphthol Blue.....	C	U282
Brilliant Alizarin Green.....	WD	657a	Brilliant Orange G.....	A	339
Brilliant Anthrazurol.....	B	U105	Brilliant Orange O.....	M	70
Brilliant Azo Acid Blue 3 G.....	S	63b	Brilliant Orseille.....	C	55

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Brilliant Patent Blue A.....	K	U317	Cachou OX.....	Lev	U731
Brilliant Patent Blue A.....	M	545	Cachou R.....	Lev	U731
Brilliant Phosphine.....	I	606b	Cachou 2 R.....	Lev	U731
Brilliant Phosphine 5 G.....	I	606b	Cachou 192.....	Lev	U731
Brilliant Pink.....	S	571a	Cachou 209.....	Lev	U731
Brilliant Ponceau 5 R.....	By	169	Cachou 761.....	Lev	U731
Brilliant Pure Yellow 6 G.....	By	U219	Cachou de Laval.....	P	705
Brilliant Purpurine 4 B.....	A	368	Calcutta Black D.....	II	U751
Brilliant Purpurine 10 B.....	A	368a	Calcutta Blue 2.....	S	U701
Brilliant Purpurine R.....	A	369	Candle Blue.....	K	U318
Brilliant Rhoduline Red B.....	By	684b	Candle Violet.....	K	U319
Brilliant Rhoduline Violet.....	By	684a	Canelle AL.....	B	003
Brilliant Safranine G.....	A	679	Capri Blue GON.....	By	620
Brilliant Safranine R.....	(Sch)	684	Capri Green BN.....	L	620a
Brilliant Scarlet (V. M.).....	C	U233	Carbazole Wool Green.....	C	U284
Brilliant Scarlet AL.....	M	A424	Carbide Black.....	I	462f
Brilliant Scarlet NY 47.....	B	U109	Carbide Black E.....	I	462f
Brilliant Scarlet R.....	BK	A443	Carbide Black EX.....	I	462f
Brilliant Scarlet 2 R.....	tM	A515	Carbide Black SX.....	I	462f
Brilliant Scarlet 3 R.....	(Sch)	169	Carbide Fast Black GF.....	I	462f
Brilliant Scarlet 4 R.....	tM	A516	Carbide Violet V.....	I	462g
Brilliant Scarlet 4 RSP.....	tM	A516	Carbon Black (V. M.).....	K	458
Brilliant Scarlet 141113.....	B	U110	Carbon Black 4 B.....	M	272
Brilliant Sky Blue 5 B.....	By	U220	Cardinal 3 B.....	H	512
Brilliant Sky Blue G.....	By	U221	Cardinal Red J.....	H	161
Brilliant Sky Blue 5 G.....	By	U222	Carmine Blue A.....	AW	U560
Brilliant Sky Blue 8 G.....	By	U223	Carmine special.....	P	U592
Brilliant Sulphonazurine R.....	By	361a	Carmine Blue V.....	K	U320
Brilliant Sulphon Red B.....	S	182	Carmine Brilliant Blue.....	AW	U561
Brilliant Sulphon Red 5 B.....	S	182	Carmolsine.....	S	163
Brilliant Victoria Blue RB.....	I	559b	Carmolsine B.....	S	163
Brilliant Wool Blue B.....	By	562a	Carmolsine 3 B.....	By	163
Brilliant Wool Blue FFR.....	By	562c	Carmolsine 6 B.....	By	163a
Brilliant Wool Blue G.....	By	562c	Carmolsine R.....	H	163a
Brilliant Yellow.....	By	U224	Carpet Red B.....	K	U321
Brilliant Yellow.....	tM	303b	Carpet Red BT.....	K	U321
Brilliant Yellow G.....	(Sch)	142	Carpet Red R.....	K	U321
Bromofluoresceic Acid A 3 G.....	I	587b	Carthamine 6 A.....	tM	573a
Bromofluoresceic Acid BA.....	M	587b	Carthamine B.....	tM	573a
Bromofluoresceic Acid BL.....	M	587b	Cashmere Black 3 BN.....	By	A215
Bromofluoresceic Acid Crystals.....	M	587b	Cashmere Black M(S).....	II	A723
Brown.....	BK	U479	Cashmere Black V.....	By	A216
Brown A 1678.....	B	U111	Cashmere Blue TC.....	By	A217
Brown GC.....	G	U607	Celestial Blue.....	WD	U541
Brown PCC.....	DII	U596	Celestine Blue B.....	By	641
Brown Y.....	II	283	Ceramine Brown AN.....	C	U285
Brown PCC.....	G	U607	Ceramine Dark Red I, II.....	C	223a
Brown 43.....	S	U700	Ceramine Orange G.....	C	35
Brown 359.....	Lev	283b	Ceramine Red 56 I.....	C	223
Brown 37104.....	H	283	Ceramine Red 56 II.....	C	223
Buffalo Black AD.....	(Sch)	266	Ceres Blue 4.....	By	U225
Buffalo Black 2 B.....	(Sch)	272	Ceres Brown 3.....	By	U226
Buffalo Black 4 B.....	(Sch)	269	Ceres Brown 4.....	By	U227
Buffalo Black 8 B, 10 B.....	(Sch)	261	Ceres Orange 3.....	By	U228
Buffalo Black EA.....	(Sch)	268	Ceres Red 3.....	By	U229
Buffalo Black NB.....	(Sch)	217	Ceres Red 6.....	By	U230
Buffalo Black PY.....	(Sch)	220	Cerise DN.....	B	512
Buffalo Black R.....	(Sch)	261	Cerise D IV.....	B	512
Buffalo Chrome Black BWN.....	(Sch)	275	Cerise M.....	tM	512
Buffalo Cyanine R.....	(Sch)	257	Cerise N.....	C	512
Buffalo Cyanine 3 R.....	(Sch)	257	Cerollavine.....	B	U112
Buffalo Direct Blue G.....	(Sch)	410	Cerotine Scarlet G.....	CJ	34b
Buffalo Direct Cardinal 7 B.....	(Sch)	405	Chicago Blue B.....	A	423
Buffalo Direct Crimson B.....	(Sch)	313	Chicago Blue 4 B.....	A	422
Buffalo Direct Garnet R.....	(Sch)	312	Chicago Blue 6 B.....	A	424
Buffalo Direct Orange R.....	(Sch)	362	Chicago Blue R.....	A	388
Buffalo Direct Orange Y.....	(Sch)	392	Chicago Blue 2 R.....	A	384
Buffalo Direct Red 4 B.....	(Sch)	363	Chicago Blue 4 R.....	A	324
Buffalo Direct Violet 4 R.....	(Sch)	375	Chicago Blue RW.....	A	419
Buffalo Direct Yellow CG.....	(Sch)	342	Chicago Blue new.....	A	422a
Buffalo Direct Yellow CRR.....	(Sch)	394	Chicago Orange G.....	G	15
Buffalo Fast Blue B.....	(Sch)	189	Chicago Red 111.....	G	A612
Buffalo Fast Blue R.....	(Sch)	188	China Blue.....	A	539
Buffalo Fast Crimson G.....	(Sch)	64	Chloramine Black EXD.....	S	469a
Buffalo Fast Crimson R.....	(Sch)	66	Chloramine Black FF.....	S	469a
Buffalo Fast Fuchsine B.....	(Sch)	147	Chloramine Blue 3 G.....	S	471
Buffalo Flamine B.....	(Sch)	94	Chloramine Black N.....	S	469
Buffalo Flamine G.....	(Sch)	95	Chloramine Blue 3 B.....	S	471a
Buffalo Rubine.....	(Sch)	110	Chloramine Blue HW.....	S	472
Butter Yellow.....	A	32	Chloramine Brown G.....	By	A218
Cachou GI.....	Lev	U731	Chloramine Dark Green B.....	S	470a
Cachou I 25.....	Lev	U731	Chloramine Fast Yellow B.....	By	617

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Chloramine Green B.....	S	470	Chrome Black FPP.....	AW	275a
Chloramine Orange G.....	By	11	Chrome Black G.....	AW	275a
Chloramine Pure Blue.....	S	471b	Chrome Black I.....	H	275a
Chloramine Red B.....	S	A712	Chrome Black LV.....	K	U322
Chloramine Red 8 BS.....	By	A219	Chrome Black M.....	H	275a
Chloramine Violet.....	By	A220	Chrome Black Z.....	H	275a
Chloramine Violet N.....	S	A713	Chrome Black 2841.....	K	U322
Chloramine Violet R.....	By	A221	Chrome Black 57006.....	H	275a
Chloramine Yellow.....	By	617	Chrome Blue.....	By	567
Chloramine Yellow DB.....	By	617	Chrome Blue ATX.....	B	163b
Chloramine Yellow FF.....	By	617	Chrome Blue B.....	(WB)	626
Chloramine Yellow G.....	S	617	Chrome Blue 2 B.....	BK	163b
Chloramine Yellow GG.....	By	617	Chrome Blue FBX.....	BK	163b
Chloramine Yellow HW.....	By	617	Chrome Blue G.....	Q	163b
Chloramine Yellow M.....	By	617	Chrome Blue R.....	AW	163b
Chloramine Yellow M.....	S	617	Chrome Blue R.....	(WB)	699
Chloramine Yellow RC.....	By	617	Chrome Blue RX.....	B	163b
Chloranilidine Scarlet.....	M	97	Chrome Blue Black B.....	K	U323
Chlorantine Blue BB.....	I	A663	Chrome Bordeaux.....	By	550
Chlorantine Brown BB.....	I	A664	Chrome Brown.....	AW	158a
Chlorantine Brown R.....	I	A665	Chrome Brown CS.....	K	158a
Chlorantine Brown 15521.....	I	A666	Chrome Brown P.....	O	90
Chlorantine Brown 15895.....	I	A667	Chrome Brown RR.....	G	158
Chlorantine Lilac B.....	I	A668	Chrome Brown 414.....	Lev	158a
Chlorantine Lilac BB.....	I	A669	Chrome Brown 2813.....	K	158a
Chlorantine Orange TR.....	I	A670	Chrome Deep Black A.....	G	275b
Chlorantine Orange 11323.....	I	A671	Chrome Deep Black A.....	tM	275
Chlorantine Pure Blue.....	I	A672	Chrome Deep Black G.....	G	275b
Chlorantine Red.....	I	358	Chrome Deep Black G.....	tM	275
Chlorantine Violet BB.....	I	A673	Chrome Fast Black A.....	CG	181c
Chlorazol Blue GBDS.....	H	417	Chrome Fast Black B.....	I	275c
Chlorazol Blue R.....	H	417	Chrome Fast Black F.....	A	A6
Chlorazol Brilliant Blue 3 B.....	H	417a	Chrome Fast Black FW.....	I	275c
Chlorazol Brilliant Blue 10 B.....	H	417a	Chrome Fast Black P 4 B.....	A	A7
Chlorazol Brilliant Blue 14 B.....	H	417a	Chrome Fast Black PF.....	A	A8
Chlorazol Brilliant Blue F.....	H	417a	Chrome Fast Black PON.....	CG	181c
Chlorazol Brilliant Bordeaux RH.....	H	A734	Chrome Fast Black PT.....	A	A9
Chlorazol Brilliant Green G.....	H	A738	Chrome Fast Black PWBL.....	I	181
Chlorazol Brown G.....	H	A735	Chrome Fast Black PWRH.....	I	181
Chlorazol Brown M.....	H	A736	Chrome Fast Black 12172.....	CG	181c
Chlorazol Brown MAS.....	H	A737	Chrome Fast Blue B.....	B	U115
Chlorazol Catharine B.....	H	A739	Chrome Fast Blue 4 B.....	A	U67
Chlorazol Drab RH.....	H	A740	Chrome Fast Blue R.....	I	U657
Chlorazol Fast Blue RH.....	H	A741	Chrome Fast Blue 13366.....	I	U658
Chlorazol Fast Bordeaux B.....	H	A742	Chrome Fast Brown A.....	I	A674
Chlorazol Fast Red 10 B.....	H	A743	Chrome Fast Brown BC.....	I	A675
Chlorazol Fast Scarlet RH.....	H	A744	Chrome Fast Brown G.....	I	A676
Chlorazol Fast Yellow A.....	H	A745	Chrome Fast Brown R.....	A	A10
Chlorazol Fast Yellow AF.....	H	A746	Chrome Fast Brown TP.....	By	U331
Chlorazol Fast Yellow AG.....	H	A747	Chrome Fast Brown TV.....	I	A677
Chlorazol Fast Yellow BS.....	H	A748	Chrome Fast Brown V.....	I	A679
Chlorazol Fast Yellow R.....	H	A749	Chrome Fast Brown 12684.....	I	A678
Chlorazol Green G.....	H	A750	Chrome Fast Brown 15823.....	I	A680
Chlorazol Red A.....	H	A751	Chrome Fast Cyanine G.....	I	A681
Chlorazol Sky Blue FF.....	H	A752	Chrome Fast Garnet BL.....	A	U79
Chlorazol Sky Blue FFS.....	H	A753	Chrome Fast Green G.....	I	A682
Chlorazol Violet B.....	H	A754	Chrome Fast Green GL.....	I	A683
Chlorazol Violet 3 B.....	H	A755	Chrome Fast Green 16394.....	I	A684
Chlorazol Violet R.....	H	A756	Chrome Fast Orange R.....	I	A685
Chlorophenine.....	CiCo	17	Chrome Fast Orange RD.....	By	U232
Chocolate Brown.....	AW	U568	Chrome Fast Red G.....	A	A11
Chocolate Brown G.....	B	U113	Chrome Fast Violet B.....	I	A686
Chocolate Brown R.....	B	U114	Chrome Fast Yellow BN.....	CG	177d
Chromal Blue G.....	G	552	Chrome Fast Yellow G.....	A	96a
Chromal Blue GC.....	G	552	Chrome Fast Yellow 2 G.....	A	96
Chromal Dark Blue K.....	G	552a	Chrome Fast Yellow GG.....	I	96a
Chromal Fast Brown G.....	G	U608	Chrome Fast Yellow 5 G.....	I	96a
Chromal Fast Brown R.....	G	U609	Chrome Fast Yellow GA.....	I	96a
Chromanil Black BF.....	A	A2	Chrome Fast Yellow O.....	I	96a
Chromanil Black FF.....	A	A3	Chrome Fast Yellow R.....	A	177
Chromanil Blue R.....	A	A4	Chrome Fast Yellow 2 R.....	A	177
Chromanil Brown 2 G.....	A	A5	Chrome Gallus Brown RR.....	G	158a
Chromazine Blue G.....	M	U429	Chrome Green.....	By	509
Chromazone Blue R.....	G	130	Chrome Green (V. M.).....	K	U324
Chromazone Red (new).....	G	129	Chrome Green C.....	K	U324
Chrome Acid Black.....	I	U655	Chrome Green G.....	L	U515
Chrome Acid Black RSL.....	I	U656	Chrome Heliotrope.....	DH	625
Chrome Azurol S.....	G	554	Chrome Leather Black E.....	B	U116
Chrome Black.....	WD	275a	Chrome Leather Black E.....	By	U233
Chrome Black BA.....	Q	A765	Chrome Leather Black E.....	S	U702
Chrome Black A.....	CG	275a	Chrome Leather Black EA.....	B	U117
Chrome Black DF.....	AW	275a	Chrome Leather Black I.....	WD	U542
Chrome Black DF.....	M	A425	Chrome Leather Black M.....	By	U234

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Chrome Leather Brown R.....	S	U708	Chrysophenine W.....	By	304a
Chrome Orange GR.....	By	U235	Chrysophenine III.....	AW	304
Chrome Patent Green N.....	K	219	Chrysophenine 190.....	K	304
Chrome Red 2598.....	K	U325	Ciba Blue B.....	I	880
Chrome Violet.....	By	549	Coba Blue 2 B.....	I	881
Chrome Violet.....	G	587	Ciba Blue 2 BD.....	I	881
Chrome Violet Brown 9457.....	K	U326	Ciba Blue G.....	I	882
Chrome Yellow.....	By	177	Ciba Blue G 2 B.....	I	882
Chrome Yellow.....	I	177e	Ciba Bordeaux B.....	I	919
Chrome Yellow D.....	By	177	Ciba Gray B.....	I	899
Chrome Yellow DF.....	By	177	Ciba Gray G.....	I	899
Chrome Yellow G.....	S	177e	Ciba Green G.....	I	891
Chrome Yellow GG.....	S	177e	Ciba Heliotrope B.....	I	897
Chrome Yellow R.....	AW	177e	Ciba Orange G.....	I	911
Chrome Yellow R.....	By	177	Ciba Pink R.....	I	910a
Chrome Yellow SM.....	K	A393	Ciba Red R.....	I	908
Chrome Yellow 2501.....	K	A393	Ciba Red B.....	I	909
Chromine G.....	K	614	Ciba Scarlet G.....	I	907
Chromine RR.....	S	614a	Ciba Violet B.....	I	901
Chromine Blue.....	AW	U562	Ciba Violet 3 B.....	I	900
Chromine Blue B.....	AW	U563	Ciba Violet R.....	I	901a
Chromine Brown R.....	AW	U564	Ciba Yellow G.....	I	890
Chromine Brown V.....	AW	U565	Cibanone Black BG.....	I	794
Chromine Fast Blue S.....	AW	U566	Cibanone Black 2 G.....	I	794
Chromine Violet 2 R.....	AW	U567	Cibanone Blue 3 G.....	I	798
Chromocitronine R.....	DH	140a	Cibanone Brown V.....	I	868
Chromocyanine V.....	DH	631	Cibanone Green G.....	I	792a
Chromogene I.....	M	777	Cibanone Olive B.....	I	792b
Chromogene Violet B.....	M	U430	Cibanone Olive G.....	I	792b
Chromopurpurine II.....	DH	U597	Cibanone Orange R.....	I	792
Chromotrope 2 B.....	M	57	Cibanone Yellow R.....	I	795
Chromotrope 6 B.....	M	67	Cinnabar Scarlet BF.....	BK	299
Chromotrope 8 B.....	M	171	Cinnabar Scarlet G.....	BK	300
Chromotrope 10 B.....	M	114	Citronine G O O.....	L	141
Chromotrope DW.....	M	57a	Citronine G O O O.....	GrE	140
Chromotrope 2 R.....	M	40	Citronine 2 R O O O O.....	GrE	140
Chromotrope S.....	M	57a	Claret NY Z 1413.....	B	U118
Chromoxane Blue R.....	By	U236	Claret Lake BL.....	By	U238
Chromoxane Violet 5 B.....	By	U237	Claret Red.....	B	U119
Chrysamine G.....	By	342	Claret Red.....	H	A757
Chrysamine K.....	S	342	Claret Red B.....	M	112a
Chrysamine R.....	By	394	Claret Red B O.....	M	112a
Chrysamine R.....	I	394	Claret Red SS.....	B	U120
Chrysobarine.....	tM	304c	Claret Red X.....	M	112a
Chrysobarine R.....	(ByCo)	304c	Clayton Yellow.....	ClCo	198
Chrysoidine.....	(ByCo)	33	Cloth Blue 1769.....	K	U327
Chrysoidine.....	C	33	Cloth Blue 1770.....	K	U327
Chrysoidine.....	(CDCo)	33	Cloth Fast Black B.....	I	U659
Chrysoidine.....	(H&M)	33	Cloth Fast Blue B.....	I	U660
Chrysoidine.....	K	33	Cloth Fast Blue GTB.....	I	U661
Chrysoidine.....	tM	33	Cloth Fast Blue R.....	I	U662
Chrysoidine A.....	B	33	Cloth Red B.....	By	233
Chrysoidine AR.....	tM	34	Cloth Red B.....	GrE	236
Chrysoidine C 2 E.....	P	33	Cloth Red BB.....	K	A394
Chrysoidine E.....	B	33	Cloth Red 2 B.....	WD	236
Chrysoidine 3 N.....	tM	33	Cloth Red 2 B.....	By	231
Chrysoidine R.....	G	34	Cloth Red BA.....	A	236
Chrysoidine R.....	tM	34	Cloth Red BO.....	By	223a
Chrysoidine R.....	C	69	Cloth Red BO.....	GrE	236
Chrysoidine 3 R.....	(Sch)	24	Cloth Red G.....	By	234
Chrysoidine RD.....	CV	33	Cloth Red G.....	By	234
Chrysoidine RE.....	P	34	Cloth Red GA.....	A	234
Chrysoidine RL.....	B	34	Cloth Red 3 GA.....	A	230
Chrysoidine RLE.....	B	34	Cloth Red GFL.....	A	234
Chrysoidine T base.....	B	34a	Cloth Red GL.....	A	234
Chrysoidine Y.....	H	33	Cloth Red O.....	M	236
Chrysoidine Y.....	(Sch)	33	Cloth Red 1769.....	K	A394
Chrysoidine Y.....	tM	33	Cloth Red 2586.....	K	A394
Chrysoidine 2 Y.....	tM	33	Cloth Scarlet C.....	K	246
Chrysoidine 46803.....	A	33	Cloth Scarlet R.....	K	252
Chrysoidine Base.....	K	33	Cloth Scarlet 2584.....	K	U827a
Chrysoidine crystals.....	(Sch)	33	Cloth Yellow R.....	GrE	A458
Chrysoarine A.....	tM	U526	Cocaine 2 BG.....	A	167
Chrysoarine.....	G	586	Cocaine 3 BG.....	A	167
Chrysophenine.....	I	304	Cocaine Orange.....	P	227a
Chrysophenine.....	S	304	Cocaine B.....	M	101
Chrysophenine G.....	A	304	Cocaine B.....	M	600
Chrysophenine G.....	AW	304	Cocaine B.....	M	601
Chrysophenine G.....	By	304	Cocaine B.....	B	601
Chrysophenine G.....	K	304	Cocaine B.....	WD	95
Chrysophenine G.....	tM	304	Cochineal.....	P	81b
Chrysophenine G O O.....	L	304	Cochineal Red A.....	B	169
Chrysophenine R.....	By	304a	Cochineal Scarlet 4 R.....	Sch	78

Name.	Manu- facturer.	Serial No.	Name.	Manu- facturer.	Serial No.
Columbia Black B.	A	455	Cotton Black	WD	738
Columbia Black EA.	A	455a	Cotton Black (V. M.)	K	A396
Columbia Black FF.	A	436	Cotton Black A.	K	A396
Columbia Black FB.	A	436	Cotton Black 3 B.	B	A71
Columbia Black F 2 B.	A	436	Cotton Black BGX.	B	A72
Columbia Black R.	A	453	Cotton Black BNK.	B	A73
Columbia Black WA.	A	455a	Cotton Black BT.	Q	462c
Columbia Black Green D.	A	465	Cotton Black CC.	Lev	462c
Columbia Blue G.	A	387	Cotton Black CK.	K	A396
Columbia Blue GM.	A	387	Cotton Black CT.	Lev	462c
Columbia Blue R.	A	325	Cotton Black GB.	K	463
Columbia Bordeaux B.	A	U90	Cotton Black GS.	K	A396
Columbia Brown M.	A	A12	Cotton Black PF.	S	462c
Columbia Brown R.	A	A13	Cotton Black RS.	S	A75
Columbia Catechine 3 B.	A	U81	Cotton Black RW.	B	462c
Columbia Catechine G.	A	U82	Cotton Black UG.	B	462h
Columbia Catechine O.	A	U83	Cotton Black V.	K	A396
Columbia Catechine R.	A	U84	Cotton Black Y.	Lev	462c
Columbia Fast Black D.	A	U86	Cotton Black 4.	Lev	462c
Columbia Fast Black FF.	A	U87	Cotton Blue	WD	A74
Columbia Fast Black G.	A	U88	Cotton Blue (V. M.)	WD	538
Columbia Fast Black V.	A	U89	Cotton Blue B.	Lev	538a
Columbia Fast Blue 2 G.	A	A16	Cotton Blue BCB.	K	U328
Columbia Fast Blue R.	A	A17	Cotton Blue BCB.	CG	U490
Columbia Fast Red F.	A	343	Cotton Blue BR.	K	538a
Columbia Fast Scarlet 4 B.	A	A18	Cotton Blue BSJ.	K	U328
Columbia Green.	A	478	Cotton Blue CC.	GrE	588a
Columbia Green B.	A	478	Cotton Blue N.	K	U228
Columbia Green 3 B.	A	478	Cotton Blue OOO.	M	539
Columbia Green G.	A	478	Cotton Blue R.	B	640
Columbia Orange R.	A	A14	Cotton Blue RN.	Q	538a
Columbia Violet R.	A	A15	Cotton Blue 5190.	B	640
Columbia Yellow.	A	617	Cotton Brown (V. M.)	B	640
Columbo Blue 4 R.	I	U663	Cotton Brown B.	BK	538a
Coomassie Black B.	Lev	433	Cotton Brown CNP.	C	490
Coomassie Blue Black.	Lev	217	Cotton Brown CR.	K	U329
Coomassie Navy Blue.	Lev	434	Cotton Brown FS.	Lev	490a
Coomassie Union Blacka.	Lev	461	Cotton Brown 4 G.	B	U122
Coomassie Wool Black D.	Lev	266	Cotton Brown M.	Q	490a
Coomassie Wool Black S.	Lev	244	Cotton Brown O.	Lev	490a
Coomassie Wool Black R.	Lev	243	Cotton Brown 2 R.	K	U329
Concentrated Blue BB.	H	U752	Cotton Brown 3 R.	K	U329
Concentrated Cotton Blue B.	M	539	Cotton Brown RN.	Lev	490a
Concentrated Cotton Blue 2.	M	539	Cotton Brown T.	I	490a
Congo.	A	307	Cotton Brown V.	S	490a
Congo Blue 2 B.	By	412	Cotton Brown 100.	K	U329
Congo Blue 3 B.	A	391	Cotton Brown 137.	Lev	490a
Congo Brown G.	A	477	Cotton Brown 153.	Lev	490a
Congo Brown R.	A	490	Cotton Corinth G.	B	312
Congo Corinth B.	A	375	Cotton Corinth G.	GrE	312
Congo Corinth B.	By	375	Cotton Cutch 21 A.	Lev	A732
Congo Corinth G.	A	312	Cotton Dark Green B.	K	U330
Congo Corinth G.	By	312	Cotton Dark Green N.	K	U330
Congo Corinth G.	S	312	Cotton Dark Green 138.	Lev	U732
Congo Fast Blue B.	A	456	Cotton Fast Red 4 BSP.	B	363
Congo Fast Blue R.	A	451	Cotton Green.	K	U331
Congo Magenta.	K	A395	Cotton Green A.	Lev	U733
Congo Magenta 3616.	K	A335	Cotton Green 88 A.	Lev	U733
Congo Orange G.	A	315	Cotton Green 105 A.	Lev	U733
Congo Orange G.	By	315	Cotton Green B.	Lev	U733
Congo Orange R.	A	373	Cotton Green D.	S	A714
Congo Orange R.	By	373	Cotton Green 2 G.	L	U516
Congo Orange RG.	By	373	Cotton Marine Blue.	K	U332
Congo Red.	GrE	307	Cotton Milling Black.	B	U124
Congo Red 4 B.	(Sch)	307	Cotton Olive.	Lev	U734
Congo Red 4 R.	By	374	Cotton Orange.	K	U333
Congo Rubine.	A	313	Cotton Orange.	Q	210c
Congo Rubine G.	S	313	Cotton Orange (V. M.)	S	34d
Congo Rubine 8714.	CG	313	Cotton Orange FB.	Lev	210a
Coreine AR, AB.	DH	646	Cotton Orange G.	K	U333
Coreine 2 R.	By	641	Cotton Orange G.	B	192
Corioflavine G.	GrE	600e	Cotton Orange GK.	S	192
Corioflavine GG.	GrE	600e	Cotton Orange R.	K	U333
Corioflavine GOOO.	GrE	600e	Cotton Orange RR.	B	210
Corioflavine R.	GrE	600e	Cotton Orange R 2 O.	K	U333
Coriphosphine OS.	By	600e	Cotton Orange 16737.	I	34c
Coriphosphine OX.	By	600e	Cotton Orange Brown (V. M.)	Lev	210b
Corvan Black BG.	B	A69	Cotton Pink B.	B	U125
Corvan Black T.	B	A70			
Corvoline BT.	B	U121			
Cotton Black.	Q	462c			
Cotton Black.	S	462c			

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Cotton Pure Blue B.....	A	U1	Cross Dye Yellow R.....	H	S179
Cotton Purple 5 BN.....	B	366	Cross Dye Yellow Y.....	H	S180
Cotton Red.....	B	363	Crumpsall Direct Fast Brown B.....	Lev	444
Cotton Red.....	tM	307	Crumpsall Direct Fast Brown O.....	Lev	445
Cotton Red A.....	C	307a	Crumpsall Direct Fast Red R.....	Lev	341
Cotton Red 65 A.....	Lev	307a	Crumpsall Yellow.....	Lev	178
Cotton Red 201 A.....	Lev	307a	Crystal Orange.....	B	U126
Cotton Red B.....	S	365	Crystal Orange 2 G.....	CG	38
Cotton Red 4 B.....	B	363	Crystal Orange 2 G.....	(Sch)	38
Cotton Red 4 B.....	GrE	307	Crystal Orange 2 G.....	WD	38
Cotton Red 8 BN.....	CG	307a	Crystal Ponceau.....	B	113
Cotton Rubine.....	B	313	Crystal Ponceau 6 R.....	A	113
Cotton Ruby.....	Lev	313a	Crystal Ponceau 6 R.....	BK	113
Cotton Scarlet.....	B	227	Crystal Scarlet.....	WD	U543
Cotton Scarlet.....	K	U334	Crystal Scarlet 6 R.....	C	U286
Cotton Scarlet.....	Q	227b	Crystal Violet.....	AW	516
Cotton Scarlet NP.....	B	227	Crystal Violet.....	B	516
Cotton Scarlet NPX.....	B	227	Crystal Violet.....	C	516
Cotton Violet 43 A.....	Lev	U735	Crystal Violet.....	S	516
Cotton Violet 2 B.....	Q	U796	Crystal Violet.....	tM	516
Cotton Violet 5 B.....	Q	U797	Crystal Violet 6 B.....	A	516
Cotton Violet R.....	R	U798	Crystal Violet CV.....	B	516
Cotton Violet X.....	Lev	U735	Crystal Violet 484.....	I	516
Cotton Yellow.....	Q	199b	Cumidine Scarlet.....	(Sch)	83
Cotton Yellow CH.....	I	296b	Cupranil Brown R.....	I	A689
Cotton Yellow GI.....	B	296	Cupranil Brown.....	I	A687
Cotton Yellow GX.....	B	296	Cupranil Brown G.....	I	A688
Cotton Yellow R.....	B	199	Cupranil Brown 12366.....	I	A690
Cresol Black A.....	GrE	U510	Cupranil Brown 15596.....	I	A690
Cresol Black BB.....	GrE	U510	Cupranil Brown 15903.....	I	A690
Cresol Black 5 B.....	GrE	U510	Curcumeine.....	A	140
Cresol Black 6 B.....	GrE	U510	Curcumeine.....	BK	140
Cresol Black 3 GOO.....	GrE	U510	Curcumeine GG.....	BK	140
Cresol Black K 5 B.....	GrE	U510	Curcumeine 8.....	A	140
Cresol Black KV.....	GrE	U510	Curcumeine.....	tM	142
Cresol Black NDN0000.....	GrE	U510	Curcumeine L.....	G	142
Cresol Black X 6 B.....	GrE	U510	Curcumeine 8000.....	L	9
Cresol Black 4286.....	GrE	U510	Curcaphenine.....	CICo	16
Cresotine Yellow G.....	GrE	351	Cutch Brown.....	AW	A540
Cresotine Yellow G.....	M	351	Cutch Brown D.....	M	A426
Cresotine Yellow GOO.....	GrE	351	Cutch Brown R.....	S	A715
Cresotine Yellow R.....	GrE	395	Cutch Brown 1759.....	I	A691
Cresyl Blue BBS.....	L	621	Cyanthracene Blue 3 B.....	CV	U727
Cresyl Fast Violet 2 B.....	L	U517	Cyanthracene Blue 2 BL.....	CV	U728
Crimson BBT.....	By	163a	Cyanthracene Yellow 8.....	CV	U729
Crimson Benime G.....	AW	U569	Cyananthrol G.....	B	860
Croceine AZ.....	C	225	Cyananthrol R.....	B	859
Croceine B.....	Sch	226	Cyananthrol RB.....	B	859
Croceine 3 B.....	Sch	235	Cyananthrol RXO.....	B	859
Croceine Orange.....	BK	37	Cyanazurine.....	DH	630
Croceine Orange.....	(CDCo)	37	Cyanine B.....	A	544
Croceine Orange G.....	By	37	Cyanine B.....	M	544
Croceine Orange G.....	K	37	Cyanine BF.....	A	544
Croceine Orange G.....	M	37	Cyanine Blue.....	CV	544a
Croceine Orange R.....	(Sch)	70	Cyanine Blue.....	tM	U527
Croceine Orange X.....	C	37	Cyanogen Blue 13623.....	I	U664
Croceine Orange Y.....	(Sch)	37	Cyanol (V. M.).....	C	546
Croceine Scarlet (V. M.).....	K	169a	Cyanol Green (V. M.).....	C	566b
Croceine Scarlet 3 B.....	By	249	Cyanol Fast Green (V. M.).....	C	566c
Croceine Scarlet 7 B.....	By	255	Cyanosine B.....	I	598
Croceine Scarlet 10 B.....	By	249a	Cyanosine spirit soluble.....	M	594
Croceine Scarlet 8 BL.....	K	255	Cyprus Green B.....	A	A19
Croceine Scarlet 2 BX.....	By	167	Dark Navy Blue 2035.....	Lev	537a
Croceine Scarlet 3 BX.....	By	167	Dark Purple (printing paste).....	Lev	U736
Croceine Scarlet MO.....	WD	A527	Deep Black D.....	tM	U528
Croceine Scarlet MOO.....	(Sch)	227	Deep Fat Black Color.....	A	U2
Croceine Scarlet MOO.....	WD	A528	Delphine Blue B.....	S	622
Croceine Scarlet O.....	K	251	Deltapurpurine.....	I	366
Cross Dye Black BF.....	H	720H	Deltapurpurine 3 B.....	AW	366a
Cross Dye Black F.....	H	720H	Deltapurpurine 5 B.....	A	366
Cross Dye Black FG.....	H	720H	Deltapurpurine 5 B.....	AW	366
Cross Dye Black JNS.....	H	720H	Deltapurpurine 5 B.....	By	366
Cross Dye Black LCV.....	H	720H	Deltapurpurine 5 B.....	S	366
Cross Dye Black M.....	H	720H	Develop Black.....	WD	333d
Cross Dye Black RX.....	H	720H	Develop Black NZ.....	Q	333d
Cross Dye Black X.....	H	720H	Developed Black B.....	AW	U570
Cross Dye Black (blue).....	H	720H	Developed Black N.....	AW	U571
Cross Dye Blue FR.....	H	8174	Developed Black R.....	AW	U572
Cross Dye Brown 2 D.....	H	8175	Developed Black W.....	AW	U573
Cross Dye Brown 4 R.....	H	8176	Developed Blue GG.....	AW	U574
Cross Dye Drab N.....	H	8177	Developed Brown M.....	AW	U575
Cross Dye Green G.....	H	8181	Developed Green F.....	AW	U576
Cross Dye Yellow D.....	H	8178	Diamine Aldehyde Blue.....	C	A333

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Diamine Aldehyde Scarlet.....	C	A339	Diamond Green 88.....	By	276
Diamine Azo Blue.....	C	A340	Diamond Green GN.....	B	499
Diamine Azo Bordeaux B.....	C	A341	Diamond Green special.....	By	278
Diamine Azo Scarlet (V. M.).....	C	A342	Diamond Magenta.....	B	U128
Diamine Black (V. M.).....	C	333b	Diamond Magenta I.....	B	U129
Diamine Black BO.....	C	403	Diamond Phosphine (V. M.).....	C	609b
Diamine Black BW.....	C	473	Diamond Red BH.....	By	A223
Diamine Blue Black E.....	C	402	Diamond Red G.....	By	A224
Diamine Blue (V. M.).....	C	284a	Diamond Yellow BB.....	AW	U577
Diamine Blue 6 G.....	C	271	Diamond Yellow G.....	By	204
Diamine Blue 3 R.....	C	401	Dianil Black PR.....	M	491
Diamine Brilliant Blue G.....	C	418	Dianil Black R.....	M	479
Diamine Brilliant Bordeaux B.....	C	319a	Dianil Blue B.....	M	389
Diamine Brilliant Rubine.....	C	A343	Dianil Blue G.....	M	415
Diamine Brilliant Scarlet.....	C	A344	Dianil Blue R.....	M	323
Diamine Brilliant Violet.....	C	A345	Dianil Crimson B.....	M	A427
Diamine Brown.....	C	448	Dianil Yellow 3 G.....	M	25
Diamine Brown (V. M.).....	C	344	Dianil Yellow R.....	M	26
Diamine Brown B.....	C	349	Dianil Yellow 2 R.....	M	27
Diamine Brown V.....	C	329	Dianol Black (V. M.).....	Lev	436a
Diamine Catechine (V. M.).....	C	A346	Dianol Black BH.....	Lev	436a
Diamine Catechine G.....	S	A716	Dianol Black E.....	Lev	436a
Diamine Cutch.....	C	432	Dianol Black EX.....	Lev	436a
Diamine Dark Blue B.....	C	A347	Dianol Black RW.....	Lev	328
Diamine Dark Green N.....	C	A348	Dianol Blue 402.....	Lev	424a
Diamine Fast Black (V. M.).....	C	A349	Dianol Brilliant Blue G.....	Lev	424b
Diamine Fast Blue (V. M.).....	C	A351	Dianol Brown CDFB.....	Lev	356a
Diamine Fast Bordeaux.....	C	A352	Dianol Brown LF.....	Lev	356a
Diamine Fast Brown (V. M.).....	C	A353	Dianol Green B.....	Lev	474
Diamine Fast Gray.....	C	A354	Dianol Orange 217 A.....	Lev	356b
Diamine Fast Orange (V. M.).....	C	A355	Dianol Orange Brown.....	Lev	356c
Diamine Fast Red (V. M.).....	C	343	Dianol Red B.....	Lev	357
Diamine Fast Scarlet (V. M.).....	C	A357	Dianol Red 2 B.....	Lev	356
Diamine Fast Violet (V. M.).....	C	A358	Diasanil Scarlet B.....	M	A428
Diamine Fast Yellow (V. M.).....	C	617a	Diasanil Scarlet 6 B.....	M	A429
Diamine Gold.....	C	431	Diazine Black H.....	(Sch)	333
Diamine Gray G.....	C	A359	Diazine Black 1401.....	K	125
Diamine Green (V. M.).....	C	474a	Diazine Green S.....	K	124
Diamine Heliotrope (V. M.).....	C	A360	Diazo Black OB.....	By	308
Diamine Jet Black (V. M.).....	C	A361	Diazo Black OT.....	By	308
Diamine Neron (V. M.).....	C	A362	Diazo Black R.....	By	308
Diamine New Blue.....	C	A363	Diazo Black 10020.....	BK	308
Diamine Nitrazol Brown G.....	C	A364	Diazo Black BHAD.....	S	333
Diamine Nitrazol Green.....	C	A365	Diazo Black BHN.....	By	333
Diamine Nitrazol Orange.....	C	A366	Diazo Black BHN.....	(WB)	333
Diamine Orange (V. M.).....	C	A367	Diazo Blue X.....	By	A236
Diamine Red (V. M.).....	C	363a	Diazo Blue Black R8.....	By	441
Diamine Red 3 B.....	A	367	Diazo Bordeaux 7 B.....	By	A225
Diamine Rose (V. M.).....	C	119	Diazo Brilliant Black B.....	By	364
Diamine Scarlet (V. M.).....	C	319	Diazo Brilliant Orange GR.....	By	A226
Diamine Sky Blue (V. M.).....	C	A368	Diazo Brilliant Scarlet B.....	By	A227
Diamine Violet N.....	C	327	Diazo Brilliant Scarlet 3 B.....	By	A228
Diamine Violet Red B.....	C	A369	Diazo Brilliant Scarlet 6 B.....	By	A232
Diamine Yellow (V. M.).....	C	A370	Diazo Brilliant Scarlet 2 BL.....	By	A230
Diamine Yellow N.....	C	404	Diazo Brilliant Scarlet 5 BL.....	By	A231
Diamineral Blue (V. M.).....	C	A371	Diazo Brilliant Scarlet BG.....	By	A229
Diamineral Brown G.....	C	A372	Diazo Brilliant Scarlet G.....	By	A233
Diaminogen (V. M.).....	C	274	Diazo Brilliant Scarlet PR.....	By	A234
Diaminogen Blue (V. M.).....	C	273	Diazo Brilliant Scarlet PR.....	WD	A529
Diaminogen Sky Blue N.....	C	A373	Diazo Brilliant Scarlet S 4 B.....	By	A235
Diamond Black AF.....	By	275	Diazo Brown G.....	By	A237
Diamond Black CY.....	By	275	Diazo Brown 3 G.....	By	A238
Diamond Black EA.....	By	275	Diazo Brown 6 G.....	By	A239
Diamond Black ET.....	By	275	Diazo Brown NR.....	By	A240
Diamond Black F.....	B	275	Diazo Brown 3 RB.....	By	A241
Diamond Black F.....	By	275	Diazo Fast Black.....	By	A242
Diamond Black FB.....	By	275	Diazo Fast Black BHX.....	By	A243
Diamond Black FB.....	By	275	Diazo Fast Black G.....	By	A244
Diamond Black GA.....	By	275	Diazo Fast Black MG.....	By	A245
Diamond Black GAF.....	B	275	Diazo Fast Black SD.....	By	A246
Diamond Black P 2 B.....	By	157	Diazo Fast Black V.....	By	A247
Diamond Black PV.....	By	157	Diazo Fast Bordeaux BL.....	By	A248
Diamond Black PVT.....	By	157	Diazo Fast Green GE.....	By	A249
Diamond Blue R.....	By	164a	Diazo Fast Red 7 BL.....	By	A250
Diamond Blue Black EB.....	By	181	Diazo Fast Violet BL.....	By	A251
Diamond Bordeaux R.....	By	A222	Diazo Fast Violet 3 RL.....	By	A252
Diamond Flavine G.....	By	102	Diazo Fast Yellow G.....	By	A253
Diamond Green B.....	By	495	Diazo Fast Yellow 2 G.....	By	A254
Diamond Green B.....	By	276	Diazo Indigo Blue BR.....	By	274a
Diamond Green BX.....	B	495	Diazo Indigo Blue 2 RL.....	By	274a
Diamond Green G.....	B	499	Diazo Indigo Blue 3 RL.....	By	274a
Diamond Green 3 G.....	By	276	Diazo Olive G.....	By	A255
Diamond Green GF.....	B	499	Diazo Pure Blue 3 GL.....	By	A256a



Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Diazo Rubine B.	By	A266	Direct Black 3 G.	S	442a
Diazo Sky Blue 3 GL.	By	A268	Direct Black 3 R.	K	U335
Diazo Sky Blue B.	By	A267	Direct Black RC.	By	A260
Diazogene Black.	AW	A541	Direct Black RO.	S	442a
Diazogene Black AB.	AW	A542	Direct Black T.	K	U335
Diazogene Black AD.	AW	A543	Direct Black V.	S	442
Diazogene Black N.	AW	A545	Direct Black VT.	By	A261
Diazogene Blue R.	AW	A546	Direct Black WC.	K	U335
Diazogene Blue 2 R.	K	A297	Direct Black 3899.	K	U335
Diazogene Blue RD.	AW	A547	Direct Black 3919.	K	U335
Diazogene Blue 4585.	K	A397	Direct Black 7565.	CY	442a
Diazogene Garnet BB.	AW	A548	Direct Black 8535.	K	U335
Diazogene Red 8 B.	AW	A549	Direct Black 14714.	I	A693
Diazomine Red L.	CV	U730	Direct Black 33336.	S	442a
Diazophenyl Black L.	G	A613	Direct Blue.	H	428a
Diazophenyl Blue BC.	G	A614	Direct Blue (V. M.).	K	U336
Diazurine B.	By	406	Direct Blue A.	K	U336
Dichrome Brown.	Q	U799	Direct Blue AB.	Q	428a
Dicyanine.	M	U431	Direct Blue B.	I	428
Dimethyl-indigo.	M	888	Direct Blue 3 B.	I	428a
Dioxine.	L	3	Direct Blue 5 B.	BK	379b
Diphene Blue B.	A	605a	Direct Blue 5 R.	K	428a
Diphenyl Black.	M	922	Direct Blue 7 B.	K	U336
Diphenyl Black L.	G	A615	Direct Blue 12 B.	K	U336
Diphenyl Black RC.	G	A616	Direct Blue BK.	I	U336
Diphenyl Blue 3 BC.	G	A617	Direct Blue BX.	K	428a
Diphenyl Blue BEC.	G	A618	Direct Blue C.	AW	428a
Diphenyl Blue BTC.	G	A620	Direct Blue FF.	K	U336
Diphenyl Blue BBEC.	G	A619	Direct Blue G.	AW	428a
Diphenyl Blue 2 R.	G	A621	Direct Blue 3 G.	S	428a
Diphenyl Blue Black.	G	334	Direct Blue GN.	CG	428a
Diphenyl Brown BBNC.	G	348	Direct Blue GRC.	K	U336
Diphenyl Brown BGN.	G	348	Direct Blue N 2 B.	K	U336
Diphenyl Brown BVCN.	G	348	Direct Blue R.	I	397
Diphenyl Brown 3 GN.	G	393	Direct Blue R.	K	U336
Diphenyl Brown GS.	G	348	Direct Blue 5 R.	K	U336
Diphenyl Brown RN.	G	347	Direct Blue RW.	I	428a
Diphenyl Catechine G.	G	206	Direct Blue WBB.	(WB)	337
Diphenyl Chlorine Yellow FF.	G	18a	Direct Blue X 2 B.	K	U336
Diphenyl Chlorine Yellow G.	G	18a	Direct Blue 80.	I	428a
Diphenyl Chlorine Yellow 229.	G	18a	Direct Blue 7079.	CV	428a
Diphenyl Chrysoline GC.	G	14	Direct Blue 13108.	I	428a
Diphenyl Chrysoline 3 GN.	G	14	Direct Blue 13503.	I	428a
Diphenyl Chrysoline GOO.	G	14	Direct Blue 51096.	H	428a
Diphenyl Chrysoline RR.	G	205	Direct Blue Black B.	By	455b
Diphenyl Citronine G.	G	12	Direct Blue Black 313.	Lev	428b
Diphenyl Dark Green BC.	G	A633	Direct Brilliant Blue 8 B.	I	A502
Diphenyl Deep Black GC.	G	A622	Direct Brown.	L	A502
Diphenyl Deep Black GN.	G	A623	Direct Brown (V. M.).	K	U337
Diphenyl Deep Black GWC.	G	A624	Direct Brown B.	K	U337
Diphenyl Deep Black VN.	G	A625	Direct Brown G.	L	A503
Diphenyl Deep Black VP.	G	A626	Direct Brown 3 GNC.	L	A636
Diphenyl Fast Black.	G	295	Direct Brown H.	K	U337
Diphenyl Fast Brown GNC.	G	207	Direct Brown HB.	L	A504
Diphenyl Fast Gray BC.	G	A627	Direct Brown JJB.	I	486
Diphenyl Fast Red.	G	343	Direct Brown JP.	I	486
Diphenyl Fast Violet BC.	G	A628	Direct Brown M.	I	344
Diphenyl Fast Yellow G.	G	18	Direct Brown N.	L	A505
Diphenyl Green BG.	G	A629	Direct Brown RW.	Q	344a
Diphenyl Green G.	G	467	Direct Brown TB.	K	U337
Diphenyl Green 3 G.	G	468	Direct Brown T2.	Q	344a
Diphenyl Green 3 GC.	G	A629	Direct Catechine G.	S	A717
Diphenyl Green 3 GF.	G	A629	Direct Catechine 30.	S	A718
Diphenyl Green KGW.	G	A629	Direct Chrome Black 14722.	I	A694
Diphenyl Orange GG.	G	13a	Direct Chrome Brown.	AW	A552
Diphenyl Orange RE.	G	13	Direct Cotton Blue GS.	K	U338
Diphenyl Red 8 B.	G	358	Direct Cotton Blue RDB.	K	U338
Diphenyl Red 184.	G	358	Direct Cotton Gray.	K	U340
Diphenyl Red 340.	G	358	Direct Cotton Green 2 B.	K	U339
Diphenyl Scarlet 3 B.	G	A634	Direct Cutch GG.	I	A695
Diphenyl Violet BVC.	G	A635	Direct Dark Brown M.	L	344
Disulphine Blue 47073 DS.	DH	520	Direct Dark Green.	K	U341
Direct Black (V. M.).	H	U753	Direct Dark Green S.	I	478b
Direct Black ABC.	AW	442a	Direct Dark Violet BE.	K	U342
Direct Black C.	AW	A550	Direct Deep Black E.	A	A20
Direct Black D.	K	A551	Direct Deep Black E.	By	462a
Direct Black D.	K	U335	Direct Deep Black EW.	By	462
Direct Black D.	Q	442a	Direct Deep Black NTS.	K	U343
Direct Black DB.	K	U335	Direct Deep Black RW.	By	463
Direct Black E.	I	A692	Direct Fast Black B.	I	A696
Direct Black FBS.	By	A259	Direct Fast Blue.	AW	A553
Direct Black FBS.	CG	333a	Direct Fast Blue FFB.	K	U344
Direct Black G.	K	U335	Direct Fast Brown C.	K	U345

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Direct Fast Brown GG.....	By	A262	Direct Yellow C.....	S	9a
Direct Fast Brown GB.....	K	U345	Direct Yellow CA.....	H	9b
Direct Fast Gray RN.....	K	U346	Direct Yellow CR.....	I	30:b
Direct Fast Orange 16710.....	I	392c	Direct Yellow EG00.....	GrE	A459
Direct Fast Red.....	Q	343a	Direct Yellow F.....	(Sch)	9
Direct Fast Red F.....	I	343	Direct Yellow G.....	K	9b
Direct Fast Red 17727.....	I	343a	Direct Yellow G.....	L	30:b
Direct Fast Red 25420.....	I	343a	Direct Yellow 2 G.....	K	9b
Direct Fast Scarlet (V. M.).....	I	A698	Direct Yellow 6 G.....	S	9f
Direct Fast Scarlet 4 BS.....	S	U704	Direct Yellow GBE.....	K	9b
Direct Fast Scarlet 4 BS.....	K	U347	Direct Yellow G00.....	GrE	A460
Direct Fast Scarlet 8 BS.....	K	U347	Direct Yellow GR.....	K	9b
Direct Fast Violet 3654.....	K	U348	Direct Yellow MC.....	G	9d
Direct Fast Yellow.....	tM	617c	Direct Yellow PC.....	Q	9h
Direct Fast Yellow OO.....	GrE	617c	Direct Yellow PI.....	K	9b
Direct Fast Yellow R.....	GrE	617c	Direct Yellow R.....	By	9
Direct Gray B.....	I	398	Direct Yellow R.....	GrE	A461
Direct Gray B.....	P	681	Direct Yellow 2 RF.....	(Sch)	9
Direct Gray J.....	P	681	Direct Yellow TO.....	I	617b
Direct Gray R.....	I	354	Direct Yellow V.....	AW	9c
Direct Green.....	I	478a	Direct Yellow WH.....	(WB)	342
Direct Green B.....	CG	A444	Direct Yellow Z.....	Q	9h
Direct Green B.....	I	478a	Direct Yellow 242.....	CiCo	9
Direct Green B.....	S	478a	Direct Yellow 19305.....	I	304b
Direct Green BC.....	Q	478a	Domingo Alizarin Black EF.....	L	A507
Direct Green C.....	CG	A445	Domingo Alizarin Black G.....	L	A508
Direct Green G.....	CG	A446	Domingo Alizarin Black R.....	L	A509
Direct Green 3 GG.....	I	478a	Domingo Alizarin Bordeaux.....	L	A509a
Direct Green KGD.....	CG	A447	Domingo Black 46216.....	L	A510
Direct Green U.....	Q	478a	Domingo Blue Black B.....	L	216
Direct Green Y.....	I	478a	Domingo Violet A.....	L	61
Direct Green 10865.....	CG	A448	Double Brilliant Scarlet G.....	tM	174
Direct Green 9753.....	S	478a	Double Ponceau.....	By	108
Direct Green 34267.....	S	478a	Double Ponceau 2 R.....	By	A263
Direct Indigo Blue A.....	I	439	Double Ponceau 4 R.....	By	A264
Direct Indigo Blue BK.....	I	440	Drazaline Alizarin.....	AW	A554
Direct Indigo Blue BN.....	I	353	Drazaline Black BH.....	AW	A555
Direct Indigo Blue R.....	S	443	Drazaline Blue 10 B.....	AW	A556
Direct Navy Blue.....	K	U349	Drazaline Blue 2 BFL.....	AW	A557
Direct Orange BR.....	K	U349	Drazaline Blue CV.....	AW	A558
Direct Orange G.....	S	392b	Drazaline Blue F.....	AW	A559
Direct Orange G.....	S	392	Drazaline Blue FF.....	K	U352
Direct Orange H.....	S	392b	Drazaline Blue FS.....	AW	A560
Direct Orange R.....	G	11b	Drazaline Blue RFL.....	AW	A562
Direct Orange R.....	I	362	Drazaline Blue VVV.....	AW	A563
Direct Orange 6 R.....	K	11a	Drazaline Blue Black HWF.....	AW	A561
Direct Orange 1901.....	L	A506	Drazaline Bordeaux 6 B.....	AW	A564
Direct Orange 6693.....	BK	392b	Drazaline Brilliant Yellow.....	AW	A565
Direct Pure Blue.....	I	392b	Drazaline Brown C3 B.....	AW	A566
Direct Purple N.....	CG	U491	Drazaline Brown FL.....	AW	A567
Direct Red.....	K	U350	Drazaline Brown G.....	AW	A568
Direct Red.....	I	307b	Drazaline Brown 3 GL.....	AW	A569
Direct Red.....	S	307b	Drazaline Brown 4 J.....	AW	A570
Direct Red B.....	DH	307b	Drazaline Brown R.....	AW	A571
Direct Red 3 B.....	S	307b	Drazaline Chlorine Yellow G.....	AW	A572
Direct Red N.....	K	U351	Drazaline Diamond Violet BB.....	AW	A573
Direct Red 215.....	I	307b	Drazaline Fast Blue 4 GFL.....	AW	A574
Direct Red 1725.....	I	307b	Drazaline Fast Gray.....	AW	A575
Direct Safranine B.....	I	307b	Drazaline Fast Red.....	AW	A576
Direct Scarlet AB.....	I	A699	Drazaline Fast Red F.....	AW	A577
Direct Scarlet B.....	Q	U800	Drazaline Fast Yellow B.....	AW	A578
Direct Scarlet 3 B.....	S	U705	Drazaline Garnet BB.....	AW	A579
Direct Scarlet FB.....	S	U706	Drazaline Garnet FL.....	AW	A580
Direct Sky Blue.....	BK	U480	Drazaline Green BX.....	AW	A581
Direct Sky Blue B.....	I	A700	Drazaline Indigo Blue.....	AW	A582
Direct Sky Blue FF.....	(WB)	426	Drazaline New Red.....	AW	A583
Direct Sky Blue 22.....	S	A719	Drazaline New Red 10 B.....	AW	A584
Direct Sky Blue 13108.....	S	A720	Drazaline Orange FL.....	AW	A585
Direct Violet B.....	I	A700	Drazaline Orange G.....	AW	A586
Direct Violet BB.....	H	413a	Drazaline Orange R.....	AW	A587
Direct Violet R.....	I	413	Drazaline Red F.....	AW	A589
Direct Violet R.....	CG	A449	Drazaline Red FL.....	AW	A590
Direct Violet RR.....	Q	352	Drazaline Red FV.....	AW	A591
Direct Violet 3653.....	S	413a	Drazaline Scarlet B.....	AW	A592
Direct Violet 4561.....	K	A398	Drazaline Sky Blue FF.....	AW	A593
Direct Violet 11508.....	K	A398	Drazaline Violet D.....	AW	A594
Direct Violet 12932.....	CG	A450	Drazaline Violet NFL.....	AW	A595
Direct Violet 18510.....	I	413a	Drazaline Violet VB.....	AW	A596
Direct Yellow (V. M.).....	I	413a	Drazaline Yellow R.....	AW	A597
Direct Yellow B.....	K	9b	Drazaline Yellow R.....	M	U433
Direct Yellow BK.....	A	9g	Drazaline Yellow S.....	AW	A599
	K	9b	Drazaline Yellow T.....	AW	A598

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Dutch Yellow.....	FA	103	Eriochrome Olive G.....	G	U619
Eboli Blue B.....	L	389	Eriochrome Phosphine R.....	G	133
Eboli Green.....	L	466	Eriochrome Red A W.....	G	29
Eclipse Black C.....	G	720G	Eriochrome Red B.....	G	29
Eclipse Brown B.....	G	S141	Eriochrome Verdon S.....	G	260
Eclipse Brown GC.....	G	S142	Eriochrome Violet B.....	G	A643
Eclipse Brown R.....	G	S143	Eriochrome Violet 2 BL.....	G	A644
Eclipse Brown BC.....	G	S144	Eriochrome Yellow 3 G.....	G	A646
Eclipse Fast Brown GC.....	G	S145	Eriochrome Yellow 2 G.....	G	A645
Eclipse Fast Brown 3 GC.....	G	S146	Eriochrome Yellow GR.....	G	A647
Eclipse Fast Brown 4 R.....	G	S147	Eriochrome Yellow S.....	G	A648
Eclipse Fast Dark Brown BC.....	G	S148	Eriocyanine AC.....	G	531
Eclipse Fast Red Brown.....	G	S149	Eriocyanine R.....	G	531
Eclipse Fast Red Brown E.....	G	S150	Eriofloxine 6 B.....	G	U620
Eclipse Phosphine GGC.....	G	S151	Eriofloxine 2 G.....	G	U621
Eclipse Phosphine RRC.....	G	S152	Erioglaucine.....	G	506
Eclipse Yellow G.....	G	S153	Erioglaucine A P.....	G	506
Eclipse Yellow 3 G.....	G	S154	Erioglaucine E P.....	G	506
Emul Red.....	A	123	Erioglaucine X.....	G	506
Eosamine B.....	A	100	Erioglaucine 49141.....	H	506
Eosamine G.....	A	100	Eriorubine B.....	G	A649
Eosine.....	(H&M)	587	Erioviridine B.....	G	503
Eosine.....	K	587	Erweco Alizarin Acid Blue R.....	RWCo	857
Eosine.....	(Sch)	587	Erweco Alizarin Acid Red SB.....	RWCo	781
Eosine (V.M.).....	C	587a	Erythrine 7 B.....	B	255
Eosine (V.M.).....	CJ	587	Erythrine C.....	C	A374
Eosine A.....	B	587a	Erythrine P.....	B	228
Eosine A.....	By	587a	Erythrine RR.....	B	249
Eosine A G.....	B	587a	Erythrosine.....	M	592
Eosine A G.....	M	587	Erythrosine A.....	M	592
Eosine A 3 G.....	M	587	Erythrosine B.....	M	592
Eosine BB.....	M	587	Erythrosine G.....	B	591
Eosine BNL.....	B	590	Ethyl Acid Blue RR.....	B	63
Eosine CA.....	B	587a	Ethyl Acid Violet S 4 BXX.....	B	61
Eosine SP.....	B	589	Ethyl Blue B.....	B	A76
Eosine W.....	B	587a	Ethyl Purple.....	B	518
Eosine (yellowish) 701.....	G	587	Ethyl Violet.....	B	518
Ergane Yellow G.....	B	U130	Ethyl Violet.....	M	518
Ergane Yellow R.....	B	U131	Ethyl Violet 8882.....	I	518
Ergane Yellow W.....	B	U132	Euchrysine RR.....	B	608
Erganone Blue B.....	B	U133	Euchrysine GG.....	B	608
Erganone Blue G.....	B	U134	Euchrysine GNX.....	B	608
Erganone Gray B.....	B	U135	Euchrysine GRNT.....	R	608
Erganone Violet R.....	B	U136	Euchrysine NX.....	B	608
Erica B.....	A	121	Euchrysine RT.....	B	608
Erica BB.....	S	121	Euchrysine RRD.....	B	608
Erica BN.....	A	121	Euchrysine 3 RX.....	B	603
Erica G.....	A	122	Excelsior Black.....	AW	A600
Erica G.....	S	122a	Excelsior Lake Scarlet (V. M.).....	C	A375
Erica GN.....	A	122	Excelsior Scarlet G.....	M	U434
Erica 2 GN.....	A	117	Excelsior Scarlet 3 R.....	M	U435
Erle Direct Black G.....	(Sch)	462	Export Blue 1504.....	B	U137
Erle Direct Black R.....	(Sch)	463	Fast Acid Blue B.....	By	562
Erle Direct Brown GB.....	(Sch)	477a	Fast Acid Blue 3 B.....	Q	562d
Erle Direct Brown GR.....	(Sch)	477	Fast Acid Blue R.....	M	584
Erle Direct Brown 3 RB.....	(Sch)	344	Fast Acid Blue RH.....	H	584a
Erle Direct Brown RF, 2 RF.....	(Sch)	488	Fast Acid Fuchsin B.....	.....	41
Erle Direct Green ET.....	(Sch)	464	Fast Acid Green RH.....	H	503a
Erle Direct Green MT.....	(Sch)	474	Fast Acid Magenta G.....	M	581a
Erle Direct Green WT.....	(Sch)	464	Fast Acid Marine Blue HBBX.....	B	U138
Erle Orange 2 R.....	(Sch)	311	Fast Acid Navy Blue GRI.....	I	U665
Erle Fast Blue SWR.....	G	A637	Fast Acid Phloxine A.....	M	581
Erle Green N.....	G	564	Fast Acid Red A.....	M	581b
Erle Violet BC.....	G	U610	Fast Acid Red EB.....	L	67a
Erle Violet RLC.....	G	U611	Fast Acid Red EGG.....	L	67a
Eriocaurine BC.....	G	A638	Fast Acid Red RH.....	H	67a
Eriocarmine 2 BC.....	G	A639	Fast Acid Violet.....	AW	580a
Eriochromal Brown EB.....	G	U612	Fast Acid Violet A 2 R.....	C	580a
Eriochromal Gray 5 G.....	G	U613	Fast Acid Violet A.....	M	582
Eriochrome Azurol BC.....	G	551	Fast Acid Violet B.....	M	580
Eriochrome Black A.....	G	184	Fast Acid Violet 3 B.....	K	U353
Eriochrome Black T.....	G	183	Fast Acid Violet 10 B.....	By	528
Eriochrome Blue Black BC.....	G	180	Fast Acid Violet ERR.....	B	U139
Eriochrome Blue Black G.....	G	180a	Fast Acid Violet R.....	K	U353
Eriochrome Brown RC.....	G	A640	Fast Acid Violet R.....	M	580a
Eriochrome Brown SDE.....	G	A641	Fast Acid Violet RBE.....	M	580a
Eriochrome Brown V.....	G	A642	Fast Acid Violet RGE.....	M	580a
Eriochrome Cyanine RC.....	G	553	Fast Acid Violet RX.....	H	580a
Eriochrome Geranol R.....	G	U614	Fast Acid Violet 416.....	K	U353
Eriochrome Green H.....	G	U615	Fast Acid Yellow (V. M.).....	C	23a
Eriochrome Green L.....	G	U616	Fast Acid Yellow RBE.....	M	U436
Eriochrome Green M.....	G	U617	Fast Acid Yellow RH.....	H	137a
Eriochrome Green O.....	G	U618	Fast Black.....	G	U622

Name.	Manu- facturer.	Serial No.	Name.	Manu- facturer.	Serial No.
Fast Black.....	L	658	Fast Red BN.....	B	112
Fast Black B.....	B	740	Fast Red BT.....	By	111
Fast Black B8.....	B	741	Fast Red CJ.....	B	163
Fast Black N.....	B	160	Fast Red IBS.....	B	A79
Fast Blue.....	Q	699	Fast Red NS.....	By	168
Fast Blue.....	tM	699	Fast Red O.....	M	161
Fast Blue A O O O O.....	GrE	699b	Fast Red S.....	(Sch)	161
Fast Blue B.....	A	697	Fast Red VR.....	By	164
Fast Blue B.....	AW	699	Fast Russian Green.....	WD	U645
Fast Blue BB.....	G	U623	Fast Sailor Blue A.....	AW	649
Fast Blue 3 BB.....	GrE	699b	Fast Sailor Blue R.....	AW	649
Fast Blue O.....	M	699	Fast Scarlet B.....	B	U141
Fast Blue R.....	B	699	Fast Scarlet B.....	K	243
Fast Blue R.....	K	699	Fast Scarlet BX.....	B	U142
Fast Blue RD.....	A	649	Fast Scarlet BXG.....	B	U143
Fast Blue Z.....	G	U624	Fast Straw Yellow V.....	AW	A601
Fast Blue 62105.....	A	649	Fast Sulphon Black F.....	S	264
Fast Bordeaux B.....	BK	236a	Fast Sulphon Violet 4 R.....	S	182
Fast Bordeaux G.....	BK	236a	Fast Toluylene Red.....	GrE	358a
Fast Brilliant Acid Carmine 6 B.....	GrE	66c	Fast Victoria Violet 8 4 B.....	GrE	61d
Fast Brilliant Black 12349.....	I	U666	Fast Violet R.....	AW	A602
Fast Brown.....	A	172	Fast Wool Blue I.....	AW	U681
Fast Brown.....	By	213	Fast Wool Scarlet 4 R.....	BK	U482
Fast Brown 3 B.....	A	172	Fast Yellow.....	B	137
Fast Brown G.....	A	212	Fast Yellow.....	By	137
Fast Brown GS.....	G	U625	Fast Yellow.....	WD	137
Fast Brown O.....	M	214	Fast Yellow FY.....	Lev	137
Fast Chrome Black.....	AW	U578	Fast Yellow GR.....	tM	137
Fast Chrome Black.....	H	275a	Fast Yellow N.....	P	150
Fast Chrome Black K.....	BK	U481	Fast Yellow R.....	K	149
Fast Chrome Blue FR.....	Q	U801	Fast Yellow E.....	C	137
Fast Cotton Blue 6 GO.....	L	U518	Fast Yellow Y.....	B	137
Fast Cotton Blue 6754.....	Q	649	Fast Yellow 95.....	Q	137
Fast Cotton Blue 6755.....	Q	649	Fastilene Blue F.....	AW	U682
Fast Cotton Yellow.....	WD	U544	Fastilene Green GG.....	AW	U683
Fast Direct Yellow 22090.....	S	304b	Fastilene Violet B.....	AW	U694
Fast Eosine L.....	B	590b	Fastilene Violet R.....	AW	U685
Fast Garnet 5 B.....	AW	U579	Fastilene Yellow.....	AW	U696
Fast Gray B.....	GrE	681	Fast Color.....	DH	U698
Fast Gray RGB.....	CG	681	Flavazine E 3 GL.....	M	20a
Fast Green B.....	tM	U529	Flavazine L.....	M	19
Fast Green C.....	By	523	Flavazine S.....	M	20
Fast Green bluish.....	By	523	Flavazine T.....	M	20a
Fast Leather Yellow 26855.....	By	U239	Flavinduline II.....	B	668
Fast Light Green.....	By	523a	Flavinduline O.....	B	668
Fast Light Orange G.....	By	38	Flavophosphine G.....	M	609d
Fast Light Yellow G.....	By	19	Flavophosphine 4 G.....	M	609d
Fast Light Yellow 2 G.....	By	19	Flavophosphine R.....	M	609d
Fast Light Yellow 3 G.....	B	U140	Formyl Violet (V. M.).....	P	630b
Fast Light Yellow 3 G.....	By	19	Fraise.....	Q	U695
Fast Light Yellow 3 GN.....	By	19	French Blue.....	P	U602
Fast Light Yellow RG.....	By	19a	French Red.....	P	U693
Fast Mordant Black FH.....	M	275	Fuchsiue.....	(By Co)	512
Fast Mordant Blue B.....	Lev	U737	Fuchsiue.....	C	512
Fast Mordant Blue B.....	M	A430	Fuchsiue.....	(H&M)	512
Fast Mordant Blue R.....	B	A431	Fuchsiue.....	(Sch)	512
Fast Mordant Yellow G.....	M	294	Fuchsiue.....	tM	512
Fast Navy Blue.....	K	649	Fuchsiue SV.....	P	512
Fast Navy Blue A.....	GrE	649	Fuchsiue B.....	tM	512
Fast Navy Blue BNNOO.....	GrE	649	Fuchsiue I.....	GrE	512
Fast Navy Blue RZOO.....	GrE	649	Fuchsiue MB.....	tM	512
Fast Neutral Violet B.....	C	678	Fuchsiue NB.....	(Sch)	512
Fast Orange O.....	M	148	Fuchsiue TR.....	(Sch)	512
Fast Paper Yellow G.....	CG	U492	Fulling Orange 16700.....	I	250a
Fast Parme.....	AW	U580	Fur Black DM.....	By	U241
Fast Pink BN.....	I	694	Fur Gray 27953.....	By	U242
Fast Pink GN.....	I	694	Gallamine Blue.....	G	637
Fast Ponceau L.....	By	A285	Gallamine Violet R, B.....	DH	639
Fast Printing Green.....	K	2	Gallazine A.....	DH	645
Fast Printing Yellow R.....	By	U240	Gallazil Blue 4 G.....	G	U626
Fast Red A.....	A	161	Galleine.....	By	599
Fast Red A.....	A	A77	Galleine SR.....	B	599
Fast Red A.....	By	161	Galleine BW.....	B	599
Fast Red.....	(Cons)	168	Galleine W.....	B	599
Fast Red.....	(CCCo)		Gallo Violet D.....	By	U243
Fast Red.....	(CDCO)	161	Gallo Violet DF.....	By	U244
Fast Red conc.....	S	161	Gallocyanine.....	By	626
Fast Red A.....	(Sch)	161	Gallocyanine.....	Q	626
Fast Red A.....	L	161	Gallocyanine.....	S	626
Fast Red A.....	(WB)	166	Gallocyanine D.....	B	626
Fast Red ANSX.....	B	A78	Gallocyanine DH.....	I	626
Fast Red AV.....	B	161	Gallocyanine F.....	B	626
Fast Red AV.....	By	161	Gallocyanine MS.....	DH	628

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Galloflavine W	B	772	Helindone Brown CR	M	904a
Gallophenin P	By	658a	Helindone Brown G	M	904
Geranine G	By	118	Helindone Brown 3 GN	M	836
Geranium B	S	512	Helindone Brown 2 R	M	902
Gentiana Violet B	A	U4	Helindone Brown 5 R	M	903
Gentianine A	G	659b	Helindone Fast Scarlet C	M	907
Gloria Black N	By	U245	Helindone Fast Scarlet R	M	915
Glycine Corinth	KI	310	Helindone Fast Scarlet RC	M	915
Glycine Red	KI	309	Helindone Gray 2 B, BR	M	921
Golden Brown	A	281	Helindone Green G	M	892
Golden Orange	By	145	Helindone Printing Black 2 RG	M	921a
Gray NO	S	698a	Helindone Orange D	M	914
Gray Blue 0095	K	U357	Helindone Orange GRN	M	835
Green A	H	495a	Helindone Orange R	M	913
Green BX	AW	U587	Helindone Pink AN	M	910
Green G	K	U354	Helindone Pink BN	M	910
Green HD	H	495a	Helindone Red B	M	917
Green PLX	B	4	Helindone Red 3 B	M	928
Green VGW	B	U144	Helindone Scarlet S	M	916
Green 21	S	U707	Helindone Violet B	M	920
Green 241	Q	U803	Helindone Violet BB	M	920
Green 15825	H	495a	Helindone Violet D	M	898
Green Crystals DIIa	K	U356	Helindone Violet R	M	920
Green Crystals E	tM	495	Helindone Yellow CG	M	810a
Green Crystals F	H	495	Helindone Yellow 3 GN	M	810
Green Crystals M	tM	495	Helindone Yellow-RN	M	810a
Green Crystals X	K	U356	Heligoland Blue RW	CG	A453
Green Crystals YD	H	495	Helio Bordeaux BL	By	A266
Green Crystals Ila	K	U356	Helio Fast Blue BL	By	A267
Green residue	K	U355	Helio Fast Red RL	By	73
Green residue D	K	U355	Helio Fast Red TRL	By	73
Grela Red R	GrE	U507	Helio Fast Ruberine RL	By	A268
Guernsey Blue O	M	539	Helio Fast Violet AL	By	A269
Guinea Black 3 BL	A	U6	Helio Fast Yellow 8 GL	By	A270
Guinea Bordeaux B	A	U6	Helio Red RM	By	A271
Guinea Bordeaux 6 B	A	U7	Helio Red RMT	By	A272
Guinea Bordeaux BL	A	U8	Heliotrope 2 B	A	321
Guinea Brown R	A	U9	Heliotrope BB	By	321
Guinea Brown 2 R	A	U10	Hessian Brown BBN	L	489
Guinea Carmine B	A	A22	Hessian Fast Red F	L	343
Guinea Carmine D	A	A23	Hessian Purple N	By	301
Guinea Cyanine LB	A	U11	Hessian Yellow	L	305
Guinea Cyanine LG	A	U12	Homophosphine OO	L	609
Guinea Cyanine LR	A	U13	Hydrazine Yellow OO	GrE	A462
Guinea Fast Green B	A	U14	Hydrazine Yellow SO	GrE	A463
Guinea Fast Green 3 B	A	U15	Hydrazol Black	AW	A603
Guinea Fast Green 2 G	A	U16	Hydrazol Black R	AW	A604
Guinea Fast Red BL	A	U17	Hydrazol Chrome Black CB	AW	A605
Guinea Fast Red 4 BL	A	U18	Hydrazol Chrome Black DB	AW	A606
Guinea Fast Red 2 R	A	U19	Hydron Blue (V. M.)	C	748
Guinea Fast Violet AL	A	U20	Hydron Brown (V. M.)	C	748a
Guinea Fast Violet 10 B	A	U21	Hydron Olive G	C	748b
Guinea Green B	A	502	Hydron Violet	C	748c
Guinea Green G	A	502	Hydron Yellow G	C	748d
Guinea Green 2 G	A	505	Hylidine Ponceau 2 R	G	U627
Guinea Red 4 R	A	A24	Hylidine Ponceau 2 R	tM	U532
Guinea Violet 4 B	A	530c	Immedial Black (V. M.)	C	724
Guinea Violet 6 B	A	530c	Immedial Blue (V. M.)	C	724a
Guinea Violet 8 4 B	A	530	Immedial Bordeaux G	C	739
Half Wool Blue 3 R	By	U246	Immedial Brilliant Black B	C	720C
Half Wool Green 63816	L	U519	Immedial Brilliant Carbon F, FG	C	720C
Half Wool Green 63816 N 5	L	U520	Immedial Brilliant Green G	C	869
Hansa Green G	M	U437	Immedial Brown (V. M.)	C	725
Hansa Rubine G	M	U438	Immedial Carbon (V. M.)	C	720
Hansa Rubine O	M	U439	Immedial Cutch	C	870
Hansa Yellow G	M	U440	Immedial Cutch (V. M.)	C	871
Hansa Yellow 5 G	M	U441	Immedial Dark Brown (V. M.)	C	725
Hansa Yellow R	M	U442	Immedial Dark Green B	C	873
Hat Black (V. M.)	C	A376	Immedial Deep Green G	C	874
Hat Black A	GrE	U508	Immedial Direct Blue (V. M.)	C	875
Hat Black 4 AN	GrE	U508	Immedial Green (V. M.)	C	746
Hat Black B	A	U22	Immedial Green Blue	C	746
Hat Black L	GrE	U508	Immedial Indogene (V. M.)	C	876
Hat Black S	GrE	U508	Immedial Indone (V. M.)	C	733
Havana Brown S	C	U287	Immedial Indone Violet B	C	733a
Hellanthine G	G	141	Immedial Khaki	C	877
Hellanthine GFF	G	141	Immedial Maroon B	C	739
Hellanthine R	G	141	Immedial New Blue G	C	878
Helindone Blue 3 GN	M	896	Immedial Olive (V. M.)	C	879
Helindone Blue 3 R	M	896a	Immedial Orange C	C	711
Helindone Brown	M	904a	Immedial Purple C	C	880
Helindone Brown AN	M	873	Immedial Sky Blue	C	728

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Immedial Violet C.....	C	881	Indigo MLB 6 B.....	M	883
Immedial Yellow (V. M.).....	C	710	Indigo MLBR.....	M	879
Immedial Yellow Olive (V. M.).....	C	882	Indigo NC.....	By	874
Imperial Green GI.....	By	A273	Indigo RB.....	B	880
Imperial Scarlet 3 B.....	By	247b	Indigo Blue N.....	C	874
Imperial Yellow R.....	By	7b	Indigo Blue 275.....	CJ	874
Indalizarin R.....	DH	633	Indigo Carmine Blue BG.....	A	U23
Indalizarin Green.....	DH	634	Indigo Extract A.....	B	877
Indamine 3 R.....	CG	704	Indigo Extract AN 4.....	B	877
Indamine 6 R.....	CG	705	Indigo Salt T.....	K	875
Indamine Blue R, B.....	M	696	Indigo (synthetic).....	B	874
Indanthrene NN.....	B	873a	Indigo (synthetic) MLB.....	M	874
Indanthrene Black B.....	B	768a	Indigo Yellow 3 G.....	I	889
Indanthrene Black BB.....	B	768a	Indigo White Base.....	B	876
Indanthrene Blue 3 G.....	B	840	Indigotin.....	I	877
Indanthrene Blue GC.....	B	843	Indigotin.....	WD	877
Indanthrene Blue GCD.....	B	842	Indigotin I.....	B	877
Indanthrene Blue GGS.....	B	841	Indigotin P.....	B	878
Indanthrene Blue GGS L.....	B	841	Indigotin 500.....	A	877
Indanthrene Blue 3 GP.....	B	840	Indo Carbon.....	C	748
Indanthrene Blue R.....	B	837	Indo Violet BF.....	A	U24
Indanthrene Blue RS.....	B	838	Indochromine RR.....	S	667
Indanthrene Blue WB.....	B	850	Indochromine T.....	S	667
Indanthrene Blue WR.....	B	850a	Indochromine Black EXD.....	S	667a
Indanthrene Blue Green B.....	B	765a	Indochromogen S.....	S	666
Indanthrene Brown.....	B	867	Indocyanine B.....	A	705a
Indanthrene Brown B.....	B	867	Indocyanine B.....	G	699c
Indanthrene Claret B.....	B	828	Indocyanine 2 RF.....	A	705a
Indanthrene Claret B extra.....	B	827	Indole Blue.....	(Sch)	126
Indanthrene Copper R.....	B	813	Indole Blue R.....	B	126
Indanthrene Dark Blue BO.....	B	763	Indophenol.....	DH	619
Indanthrene Dark Blue BT.....	B	846	Induline.....	(ByCo)	699
Indanthrene Fast Blue RR.....	B	837a	Induline.....	(CDCo)	697
Indanthrene Gold Orange G.....	B	760	Induline.....	G	697
Indanthrene Gold Orange R.....	B	761	Induline B.....	By	699
Indanthrene Gold Orange RS.....	B	761	Induline 2 B.....	CJ	699
Indanthrene Gold Orange 2 RT.....	B	761	Induline BA.....	P	697
Indanthrene Gray BP.....	B	848	Induline DB.....	tM	699
Indanthrene Green B.....	B	765	Induline N.....	tM	699
Indanthrene Maroon R.....	B	845	Induline NN.....	B	699
Indanthrene Olive G.....	B	791	Induline NBL.....	By	699
Indanthrene Orange RT.....	B	812	Induline RN.....	K	699
Indanthrene Pink B.....	B	873b	Induline S.....	I	697
Indanthrene Red BN.....	B	831	Induline WLX.....	B	699
Indanthrene Red G.....	B	826	Induline 1768.....	K	699
Indanthrene Red R.....	B	830	Induline 1778.....	K	699
Indanthrene Red Brown R.....	B	873c	Induline 10350.....	I	697
Indanthrene Red Violet RRN.....	B	873d	Induline 38724.....	H	699
Indanthrene Scarlet GS.....	B	762	Induline 38725.....	H	699
Indanthrene Violet B.....	B	768	Induline Black base 5789.....	K	700
Indanthrene Violet R.....	B	766	Induline Red (V. M.).....	K	699a
Indanthrene Violet RN.....	B	832	Induline Scarlet (Iris Blue).....	B	671
Indanthrene Violet RR.....	B	767	Ingrain Black.....	H	A759
Indanthrene Violet RT.....	B	764	Ingrain Black 4 B.....	H	A758
Indanthrene Violet Yellow G.....	B	849a	Ink Blue BJTBN OO.....	GrE	U509
Indanthrene Violet Yellow P.....	B	849a	Ink Blue BJTNO.....	GrE	U509
Indanthrene Yellow G.....	B	849	Ink Blue BN OO.....	GrE	U509
Indanthrene Yellow GP.....	B	849	Intensive Blue B.....	By	562
Indazine M.....	C	689	Iris Blue.....	B	648
Indazurine B.....	I	414	Irisamine.....	C	576
Indazurine BB.....	I	429	Isamine Blue (V. M.).....	C	U288
Indazurine GM.....	I	427	Isodiphenyl Black.....	G	437
Indazurine 5 GM.....	I	430	Janus Brown B.....	M	435
Indazurine RM.....	I	396	Janus Gray B.....	M	128
Indazurine TS.....	I	399	Janus Red B.....	M	240
India Rose 17285.....	I	U667	Janus Yellow G.....	B	222
India Red.....	I	U628	Japan Black.....	B	U145
Indian Yellow (V. M.).....	C	141b	Japan Black B.....	B	U146
Indian Yellow G.....	By	141	Japan Black M.....	B	U148
Indian Yellow GN.....	By	141	Japan Black MBG.....	B	U149
Indian Yellow R.....	By	140	Japan Black MF.....	B	U150
Indigene R.....	AW	697	Jasmine.....	G	U629
Indigene Blue BB.....	I	A701	Jaune Métanile Bromé.....	P	135
Indigene Blue R.....	I	A702	Jet Black APX.....	B	U151
Indigo paste.....	I	874	Jet Black R.....	By	262
Indigo powder.....	Q	874	Jet Black RR.....	B	U152
Indigo solution.....	M	874	Jute Black B.....	By	U153
Indigo FBP.....	By	874	Jute Black L.....	tM	U533
Indigo G.....	B	888	Jute Black RNT.....	B	U153
Indigo 7 G.....	By	874	Jute Coal Black S.....	By	U154
Indigo KG.....	K	883	Katigene Black SWR.....	By	720By
Indigo MLB.....	M	874	Katigene Black T 3 B.....	By	720By
Indigo MLB 2 B.....	M	880	Katigene Black TW.....	By	720By

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Katigene Black TX.....	By	720By	Lake Purple 3 P.....	B	U187
Katigene Black 26744.....	By	720By	Lake Red C.....	M	183
Katigene Black Brown BW.....	By	839	Lake Red D.....	M	200
Katigene Black Brown GN.....	By	840	Lake Red P.....	M	132
Katigene Black Brown R.....	By	841	Lake Scarlet.....	C	A377
Katigene Blue Black 4 BPA.....	By	720By	Lake Scarlet Red D.....	M	A435
Katigene Brilliant Black B.....	By	720By	Lake Yellow 28227.....	By	U247
Katigene Brilliant Black FG.....	By	720By	Lanacyl Blue.....	C	187
Katigene Brilliant Green 3 G.....	By	843	Lanacyl Violet.....	C	186
Katigene Brown 2 R.....	By	845	Lanafuchstine (V. M.).....	C	64
Katigene Brown V.....	By	846	Leather Black (V. M.).....	C	U290
Katigene Chrome Blue 5 G.....	By	847	Leather Black BO.....	B	U158
Katigene Cutch B.....	By	848	Leather Black CR.....	B	U159
Katigene Deep Black B.....	By	720By	Leather Black I.....	I	U677
Katigene Direct Blue B.....	By	849	Leather Black.....	K	U358
Katigene Direct Blue RF.....	By	850	Leather Black R.....	tM	U535
Katigene Green 2 B.....	By	746	Leather Black T.....	M	U447
Katigene Green 4 B.....	By	746	Leather Black 3553.....	GrE	U511
Katigene Green 2 G.....	By	746	Leather Brown.....	GrE	208
Katigene Green MK.....	By	746	Leather Brown.....	K	U359
Katigene Indigo.....	By	851	Leather Brown GG.....	By	U248
Katigene Indigo B.....	By	852	Leather Brown LX.....	Lev	283a
Katigene Indigo G.....	By	853	Leather Brown R.....	I	283a
Katigene Indigo 3 GT.....	By	854	Leather Flavine 9118.....	I	606g
Katigene Khaki G.....	By	855	Leather Flavine 9118.....	S	606g
Katigene Olive GN.....	By	856	Leather Gold 5902.....	BK	U484
Katigene Olive Brown R.....	By	857	Leather Olive 71930.....	A	U28
Katigene Red Brown R.....	By	858	Leather Orange.....	(Sch)	211
Katigene Red Brown 3 R.....	By	859	Leather Orange B.....	Lev	U738
Katigene Violet B.....	By	860	Leather Orange BY.....	Lev	U739
Katigene Violet 3 R.....	By	861	Leather Red O.....	M	U448
Katigene Yellow G.....	By	862	Leather Yellow A.....	GrE	606
Katigene Yellow GG.....	By	863	Leather Yellow FG.....	Q	606
Katigene Yellow GR.....	By	864	Leather Yellow FU.....	Q	606
Katigene Yellow Brown GG.....	By	865	Leather Yellow G.....	CG	606
Katigene Yellow Brown GR.....	By	866	Leather Yellow G.....	GrE	606
Katigene Yellow Brown 9 R.....	By	867	Leather Yellow 2 G.....	M	606
Katigene Yellow Brown RL.....	By	868	Leather Yellow 3 G.....	CG	606
Ketone Blue 4 BN.....	M	547	Leather Yellow 3 G.....	CG	606
Kiton Blue N.....	I	U668	Leather Yellow GC.....	GrE	606
Kiton Fast Orange G.....	I	U669	Leather Yellow GN.....	AW	606
Kiton Red 6 B.....	I	U672	Leather Yellow GS.....	GrE	606
Kiton Red G.....	I	U673	Leather Yellow M.....	GrE	606
Kiton Violet 12 B.....	I	U674	Leather Yellow NL.....	BK	606
Kiton Fast Yellow 3 G.....	I	U670	Leather Yellow O.....	M	606
Kiton Fast Yellow R.....	I	U671	Leather Yellow P.....	tM	606
Kiton Yellow G.....	I	U675	Leather Yellow R.....	Q	606
Kiton Yellow GG.....	I	U676	Leather Yellow TBR.....	tM	606
Kraft Brown L.....	B	U155	Leather Yellow TG.....	Q	606
Kraft Brown basic YZ.....	B	U155	Leather Yellow 5828a.....	L	606
Kryogene Black BNX.....	B	755	Lemon Yellow R.....	K	U360
Kryogene Black TBO.....	B	720B	Leuco Dark Green B.....	By	866
Kryogene Black TG.....	B	720B	Leuco-Gallo Thionine DH.....	DH	664
Kryogene Black TGE.....	B	720B	Leucol Brown B.....	By	872
Kryogene Black TGO.....	B	720	Light Blue.....	tM	521
Kryogene Blue BNO.....	B	756	Light Blue G.....	tM	539
Kryogene Brown A.....	B	753	Light Green 2 A.....	tM	518
Kryogene Brown GX.....	B	750	Light Green SF.....	B	504
Kryogene Brown RBNXX.....	B	751	Light Green SF.....	B	505
Kryogene Brown RXX.....	B	751a	Light Green SL.....	B	505
Kryogene Direct Blue B.....	B	753	Lilac PC.....	DH	U599
Kryogene Direct Blue 3 B.....	B	754	Lilac PC.....	G	U631
Kryogene Direct Blue BNAGX.....	B	753	Liquid Oil Black N.....	tM	U536
Kryogene Direct Blue G.....	B	752	Lithol Claret B.....	B	A80
Kryogene Green GX.....	B	754a	Lithol Fast Orange R.....	B	A82
Kryogene Pure Blue R.....	B	729	Lithol Fast Scarlet B.....	B	73a
Kryogene Red Brown GRXX.....	B	751b	Lithol Fast Scarlet G.....	B	73a
Kryogene Violet 3 RX.....	B	754b	Lithol Fast Scarlet RN.....	B	73a
Kryogene Yellow G.....	B	712	Lithol Red 3 B.....	B	173a
Kryogene Yellow GG.....	B	712	Lithol Red GG.....	B	173a
Kryogene Yellow R.....	B	716	Lithol Red 3 G.....	B	173a
Lacquer Black R.....	A	U25	Lithol Red R.....	B	173
Lake Black C.....	C	U289	Lithol Red RG.....	B	173a
Lake Black P.....	G	U630	Lithol Red RS.....	B	173a
Lake Blue ABIL.....	M	U443	Lithol Rubine BN.....	B	152
Lake Blue ABOL.....	M	U444	Magenta.....	M	512
Lake Blue AV.....	M	U445	Magenta A.....	B	512
Lake Blue AVO.....	M	U446	Magenta AB.....	B	512
Lake Blue I.....	B	U156	Magenta B.....	C	512
Lake Blue RT.....	BK	U483	Magenta FABs.....	B	512
Lake Bordeaux B.....	M	179	Magenta L.....	B	512
			Magenta S.....	B	512

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Magenta TP.	tM	512	Methyl Orange.	tM	138
Magenta (acetate).	B	512	Methyl Silk Blue (new).	G	537d
Magenta crystals.	K	512	Methyl Soluble Blue 3 S.	B	U160
Magenta crystals.	tM	512	Methyl Violet.	(H&M)	515
Magenta crystals 3.	tM	512	Methyl Violet.	tM	515
Magenta crystals II.	tM	512	Methyl Violet (V. M.)	B	515
Malachite Green.	M	495	Methyl Violet B.	G	515
Malachite Green.	tM	495	Methyl Violet BB.	G	515
Malachite Green BX.	B	495	Methyl Violet 2 B.	K	515
Malachite Green LA 4 B.	M	495	Methyl Violet 2 B.	M	515
Malachite Green P.	K	495	Methyl Violet 2 B.	tM	515
Malachite Green Z.	CJ	495	Methyl Violet 2 B.	M	515
Malachite Green 2639.	A	495	Methyl Violet 2 B.	tM	515
Malachite Green Crystals.	G	495	Methyl Violet 2 B.	M	515
Malachite Green Crystals.	M	495	Methyl Violet 4 B.	tM	515
Malachite Green Crystals MS.	tM	495	Methyl Violet 5 B.	By	517
Malachite Green Crystals.	K	495	Methyl Violet 5 B.	tM	515
Malachite Green Crystals NN.	M	495	Methyl Violet 6 B.	B	517
Malachite Green Base.	CJ	495	Methyl Violet 6 B.	M	515
Malachite Green Salt 10.	tM	U537	Methyl Violet 7 B.	By	517
Maroon.	By	512	Methyl Violet base 7 B.	BK	517
Marron Cordu.	Q	512	Methyl Violet 7 B.	tM	515
Mars Red A X.	B	163	Methyl Violet B-BBM.	M	515
Mars Red G X.	B	163	Methyl Violet 3 BHN.	tM	515
Martius Yellow 741.	G	6	Methyl Violet BIA.	tM	515
Martius Yellow 6749.	BK	6	Methyl Violet 2 BP.	tM	515
Mauve.	P	688	Methyl Violet 3 BIA.	tM	515
Melanogene Blue.	M	745	Methyl Violet 5 BIA.	tM	515
Melantherine IH.	I	333c	Methyl Violet 2 BN.	tM	515
Melantherine 11818.	I	333c	Methyl Violet 6 BN.	tM	515
Melantherine 12760.	I	333c	Methyl Violet 4 BOOATN.	GrE	515
Meldola's Blue 3 R.	S	649	Methyl Violet DB.	tM	515
Melogene Blue BH.	S	438	Methyl Violet IB.	By	515
Mercerine Wool Scarlet 5 B.	H	U756	Methyl Violet IBA.	By	515
Mercol Brown 3 R.	H	U754	Methyl Violet N.	B	515
Mercerol Orange 2 R.	H	U755	Methyl Violet NY 147.	B	515
Meridian Black A E.	S	U708	Methyl Violet R.	M	515
Meridian Black A N.	S	U709	Methyl Violet 3 R.	tM	515
Metachrome Blue B.	A	U27	Methyl Violet 5 R.	B	515
Metachrome Blue G.	A	U28	Methyl Violet 5 R.	M	515
Metachrome Blue Black 2 B.	A	U29	Methyl Violet 5 R.	Q	515
Metachrome Blue Black 2 BX.	A	U30	Methyl Violet 5 R.	tM	515
Metachrome Bordeaux R.	A	92	Methyl Violet 5 R.	B	515
Metachrome Brown B.	A	89	Methyl Violet 5 R.	M	515
Metachrome Brown BL.	A	U31	Methyl Violet 5 R.	Q	515
Metachrome Brown BRL.	A	U32	Methyl Violet 5 R.	tM	515
Metachrome Olive B.	A	A25	Methyl Violet 5 R.	tM	515
Metachrome Olive Brown G.	A	A26	Methyl Violet 5 R.	B	515
Metachrome Orange R.	A	58	Methyl Violet 129.	K	515
Metachrome Orange 3 R.	A	U33	Methyl Violet base.	B	515
Metachrome Red G.	A	U34	Methyl Violet base BB.	K	515
Metachrome Violet B.	A	U35	Methyl Violet base 74418.	H	515
Metachrome Violet 2 R.	A	U36	Methylene Blue.	C	659
Metachrome Yellow RA.	A	A27	Methylene Blue.	G	659
Metamine Brown.	S	U710	Methylene Blue.	M	659
Metanil Yellow.	A	134	Methylene Blue.	Q	659
Metanil Yellow.	AW	134	Methylene Blue.	WD	659
Metanil Yellow.	B	134	Methylene Blue AN.	B	663
Metanil Yellow.	By	134	Methylene Blue B.	B	669
Metanil Yellow.	CG	134	Methylene Blue B.	By	669
Metanil Yellow.	CJ	134	Methylene Blue B.	tM	669
Metanil Yellow.	K	134	Methylene Blue BB.	B	669
Metanil Yellow.	S	134	Methylene Blue BB.	By	659
Metanil Yellow.	(Sch)	134	Methylene Blue 2 B.	H	659
Metanil Yellow.	tM	134	Methylene Blue BB.	M	659
Metanil Yellow.	WD	134	Methylene Blue BB.	S	659
Metanil Yellow GR.	tM	134	Methylene Blue 2 B.	tM	659
Metanil Yellow PL.	B	134	Methylene Blue BA.	tM	659
Metanil Yellow PLG.	B	134	Methylene Blue BEX.	B	659
Metanil Yellow X.	tM	134	Methylene Blue 2 BD.	A	659
Metanil Red 3 B.	By	A274	Methylene Blue BG.	B	659
Metaphenylene Blue 2 B.	C	691	Methylene Blue BG.	tM	659
Metaphenylene Blue R.	C	690	Methylene Blue BGN.	B	659
Methyl Alkali Blue.	B	535	Methylene Blue BX.	A	659
Methyl Blue.	tM	537	Methylene Blue D.	I	659
Methyl Blue MBS.	GrE	537	Methylene Blue DBBM.	M	659
Methyl Blue for silk MLB.	GrE	537	Methylene Blue DDBM.	M	659
Methyl Eosine.	B	588	Methylene Blue FKII.	K	659
Methyl Gallus Blue.	G	U632	Methylene Blue G.	I	659
Methyl Green.	P	519	Methylene Blue HGG.	B	659
Methyl Indone B.	C	127	Methylene Blue L.	K	659
Methyl Lyons Blue.	G	537c	Methylene Blue MD.	B	659



Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Methylene Blue MDX.....	B	659	Nako Brown DR.....	M	923a
Methylene Blue MEDZ.....	M	659	Nako Brown 3 GA.....	M	923a
Methylene Blue MNX.....	B	663	Nako Brown 3 GN.....	M	923a
Methylene Blue 3 R.....	M	659	Nako Brown P.....	M	923a
Methylene Blue S.....	CR	659	Nako Brown RH.....	M	923a
Methylene Blue VN.....	B	663	Nako Gray B.....	M	923a
Methylene Blue 15746.....	P	659	Nako Gray 6 B.....	M	923a
Methylene Blue 52067.....	tM	659	Nako Yellow O.....	M	923a
Methylene Gray ND.....	M	681	Nankin.....	tM	606g
Methylene Green.....	K	660	Naphthalene Acid Black 4 B.....	By	258
Methylene Green.....	S	660	Naphthalene Black D.....	H	U758
Methylene Green B.....	B	660	Naphthalene Black 12 B.....	H	U757
Methylene Green BX.....	B	660	Naphthalene Blue B.....	M	A437
Methylene Green BX.....	K	660	Naphthalene Blue DL.....	M	A438
Methylene Green N.....	M	660	Naphthalene Green.....	M	564
Methylene Green P.....	G	660	Naphthalene Green V.....	M	564
Methylene Green P.....	I	660	Naphthamine Black (V. M.).....	K	335
Methylene Green T.....	G	660	Naphthamine Blue (V. M.).....	K	338
Methylene Green 247.....	K	660	Naphthamine Brilliant Blue G.....	K	379a
Methylene Heliotrope O.....	K	U449	Naphthamine Brilliant Blue 3.....	K	379a
Methylene Violet 3 RA.....	M	680	Naphthamine Brown.....	K	477a
Methylene Yellow H.....	M	618	Naphthamine Deep Black HW.....	K	335a
Mikado Brown 2 B.....	L	11	Naphthamine Direct Black (V. M.).....	K	458
Mikado Brown M.....	L	11	Naphthamine Direct Blue BXR.....	K	A399
Mikado Golden Yellow 6 G.....	L	10	Naphthamine Direct Blue ER.....	K	A399
Mikado Golden Yellow 8 G.....	L	10	Naphthamine Direct Blue 2 R.....	K	A399
Mikado Orange G.....	L	11	Naphthamine Direct Blue 3 R.....	K	A399
Mikado Orange 4 RC.....	A	11	Naphthamine Direct Blue 3692.....	K	A399
Mikado Orange 4 RO.....	A	11	Naphthamine Direct Green AG.....	K	A400
Mikado Orange 4 RO.....	L	11	Naphthamine Fast Black (V. M.).....	K	U362
Milling Blue BC.....	K	693	Naphthamine Fast Black KS.....	K	U361
Milling Blue GR.....	A	U37	Naphthamine Fast Bordeaux BG.....	K	U363
Milling Blue 2 R.....	M	A436	Naphthamine Fast Scarlet (V. M.).....	K	U364
Milling Blue 5 R.....	A	U38	Naphthamine Fast Scarlet B.....	K	U364
Milling Brown G.....	L	U521	Naphthamine Fast Scarlet S B.....	K	U364
Milling Green BW.....	L	503	Naphthamine Fast Scarlet R.....	K	U364
Milling Green DB.....	AW	523b	Naphthamine Green (V. M.).....	K	A401
Milling Green DS.....	AW	523b	Naphthamine Orange (V. M.).....	K	A402
Milling Orange G.....	A	U39	Naphthamine Red 3605 H.....	K	343
Milling Orange G.....	By	A275	Naphthamine Scarlet.....	K	U365
Milling Orange JN.....	WD	250	Naphthamine Violet BE.....	K	326
Milling Orange RO.....	L	58	Naphthamine Violet R.....	K	327b
Milling Orange 88.....	WD	250	Naphthamine Yellow (V. M.).....	K	9a
Milling Red.....	A	U40	Naphthamine Yellow R.....	K	9a
Milling Red (V. M.).....	C	293	Naphthamine Yellow X.....	K	9a
Milling Red 6 BA.....	A	U41	Naphthazine Blue.....	WD	692
Milling Red GA.....	A	U42	Naphthazine Navy Blue 156.....	WD	692a
Milling Red R.....	WD	298	Naphthazurine BA.....	GrE	383
Milling Scarlet B.....	M	400b	Naphthazurine 3703.....	K	383
Milling Scarlet G.....	M	400b	Naphthochrome Violet R.....	I	U678
Milling Scarlet 4 R.....	M	400	Naphthoform Black 3930.....	K	U366
Milling Yellow (V. M.).....	C	A378	Naphthogene Blue B.....	A	A28
Milling Yellow 3 G.....	A	U43	Naphthogene Blue 2 R.....	A	A29
Milling Yellow GA.....	A	U44	Naphthogene Blue 4 R.....	A	A30
Milling Yellow 3 GO.....	CV	177	Naphthogene Blue 6 R.....	A	A31
Milling Yellow H.....	M	177c	Naphthogene Indigo Blue R.....	A	U45
Milling Yellow HG.....	M	177c	Naphthogene Pure Blue 4 B.....	A	U46
Milling Yellow H 3 G.....	M	177c	Naphthol Black (V. M.).....	C	272a
Mimosa.....	G	198	Naphthol Black (V. M.).....	K	269a
Mimosa C.....	G	198	Naphthol Black A.....	K	269a
Mimosa 2.....	G	198	Naphthol Black 2 B.....	By	269d
Mineral Blue.....	C	U291	Naphthol Black 3 B.....	CV	272a
Modern Azurine DH.....	DH	640	Naphthol Black BK.....	tM	269
Modern Blue.....	DH	629	Naphthol Black CR.....	K	269a
Modern Cyanine.....	DH	627	Naphthol Black MB.....	K	269a
Modern Violet.....	DH	635	Naphthol Black N.....	K	269a
Monochrome Black F.....	By	U249	Naphthol Black TR.....	K	269a
Monochrome Black Blue G.....	By	U250	Naphthol Black greenish.....	K	296a
Monochrome Blue 5 R.....	By	U251	Naphthol Blue.....	C	A379
Monochrome Brown BX.....	By	U252	Naphthol Blue 2 R.....	tM	649
Monochrome Brown G.....	By	U253	Naphthol Blue Black (V. M.).....	C	217c
Monochrome Brown V.....	By	U254	Naphthol Blue Black M.....	By	217
Mordant Blue 13707.....	I	A703	Naphthol Dark Green G.....	C	U282
Mordant Yellow GD.....	B	177	Naphthol Green B.....	By	4
Mordant Yellow GS.....	B	177	Naphthol Green B.....	C	4
Mordant Yellow GTS.....	B	48	Naphthol Orange.....	A	144
Mordant Yellow R.....	B	177	Naphthol Orange.....	(Cons)	144
Mordant Yellow 3 R.....	B	58	Naphthol Orange.....	(CCCo)	
Muscarine.....	DH	655	Naphthol Orange.....	I	144
Nako Blue Black B.....	M	923a	Naphthol Red (V. M.).....	C	168
Nako Black DBB.....	M	923a	Naphthol Red GR.....	B	168
Nako Black O.....	M	923a	Naphthol Red S.....	B	168
Nako Brown B.....	M	923a	Naphthol Yellow.....	I	7

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Naphthol Yellow	Q	7	New Fast Green 3 B.	I	497
Naphthol Yellow S.	B	7	New Fast Straw Yellow	AW	A608
Naphthol Yellow S.	By	7	New Fuchsine S.	GrE	513
Naphthol Yellow SE	B	7	New Magenta O.	GrE	513
Naphthol Yellow SE	By	7	New Magenta O.	M	512
Naphthol Yellow SL	M	7	New Methylene Blue (V. M.)	C	663
Naphthol Yellow SL	M	7	New Methylene Blue F.	By	663
Naphthyl Blue Black N.	C	268	New Methylene Blue GG.	C	651
Naphthylamine Black (V. M.)	C	266	New Nigrosine	AW	700
Naphthylamine Black 4 AN.	By	217d	New Patent Blue B.	By	563
Naphthylamine Black 4 B.	By	217d	New Patent Blue GA.	By	545b
Naphthylamine Black 10 B.	By	217	New Phosphine G.	C	75
Naphthylamine Black 4 BK.	By	217d	New Polychromine FB.	G	616
Naphthylamine Red 3 BM.	B	168a	New Toluylene Brown OO.	GrE	A465
Naphthylamine Black B 2 N.	K	266a	New Toluylene Brown O.	GrE	A464
Naphthylamine Black 4 BN.	By	217d	New Toluylene Brown R.	GrE	A466
Naphthylamine Black 6 BN.	By	217d	New Victoria Black B.	By	262
Naphthylamine Black BOO.	K	266a	New Victoria Blue B.	By	558
Naphthylamine Black 4 BX.	B	266a	Niagara Black Blue R.	(Sch)	441
Naphthylamine Black CSR.	By	217d	Niagara Blue B. 2 B.	(Sch)	337
Naphthylamine Black CSB.	By	217d	Niagara Blue 4 B.	(Sch)	426
Naphthylamine Black F.	By	217d	Niagara Blue 6 B.	(Sch)	424
Naphthylamine Black NA.	K	266a	Niagara Blue BR.	(Sch)	386
Naphthylamine Black NSBN.	K	266a	Niagara Blue GW, HW, RW.	(Sch)	336
Naphthylamine Black SX.	B	266a	Niagara Blue R.	(Sch)	326
Naphthylamine Black 2002.	K	266a	Niagara Fast Red FD.	(Sch)	343
Naphthylamine Black 2003.	K	266a	Niagara Violet 2 B.	(Sch)	326
Naphthylamine Blue Black.	C	A380	Niagara Violet 3 R.	(Sch)	327
Naphthylamine Green T.	By	A276	Nicholson Blue 4 B.	P	536
Naphthylamine Sky Blue DD.	NF	A530	Night Blue	B	560
Navy Blue.	C	A381	Night Blue	I	560
Navy Blue D.	I	537a	Night Green A.	tM	503
Navy Blue D.	I	537a	Nigrosine.	CG	682
Navy Blue F.	AW	537	Nigrophor.	B	218
Navy Blue GR.	CV	537a	Nigrosine.	(CDCo)	668
Navy Blue 17184.	K	U367	Nigrosine.	(H&M)	700
Navy Blue 5 R.	CV	537a	Nigrosine.	K	668
Navy Blue SM.	P	537a	Nigrosine.	tM	668
Navy Blue T.	AW	537	Nigrosine (V. M.)	K	668
Neotolyl Black B.	M	U450	Nigrosine s. 1. s.	A	668
Neotolyl Black BB.	M	U451	Nigrosine spirit soluble.	(ByCo)	668
Neotolyl Black 4 B.	M	U452	Nigrosine soluble in alcohol.	tM	668
Neotolyl Black TL.	M	U453	Nigrosine soluble in fat.	tM	668
Neotolyl Black VL.	M	U454	Nigrosine s. 1. w.	A	700
Neptune Blue B.	B	545	Nigrosine, water soluble.	(ByCo)	700
Neptune Blue BG.	B	543	Nigrosine (soluble in water) 19665.	CJ	700
Neptune Blue BGN.	B	543	Nigrosine AD s. 1. w.	A	700
Neptune Blue BGX.	B	543	Nigrosine AR s. 1. w.	A	700
Neptune Blue BR.	B	545a	Nigrosine (soluble in water) AR.	CJ	700
Neptune Blue BTE.	B	545a	Nigrosine B.	I	700
Neptune Blue R.	B	545a	Nigrosine B.	tM	700
Neptune Brown RX.	B	U161	Nigrosine B s. 1. s.	A	668
Neptune Green SAX.	B	503	Nigrosine B s. 1. s.	tM	668
Neptune Green SBL.	B	503	Nigrosine 2 B.	G	668
Neptune Green SGX.	B	503	Nigrosine 2 B.	I	700
Nerazine (V. M.)	C	U293	Nigrosine 2 B.	tM	700
Nerol B.	A	A32	Nigrosine 3 B.	tM	700
Nerol 2 B.	A	A33	Nigrosine BC.	G	668
Nerol BL.	A	A34	Nigrosine BT.	G	668
Nerol 2 BL.	A	A35	Nigrosine BTR.	tM	668
Nerol VL.	A	A36	Nigrosine D.	tM	700
Neutral Blue R.	AW	676	Nigrosine FAL s. 1. w.	A	700
Neutral Blue 3 R.	M	U455	Nigrosine FAR s. 1. w.	A	700
Neutral Gray G.	A	241	Nigrosine 3 G s. 1. w.	A	700
Neutral Red.	C	670	Nigrosine I.	S	700
Neutral Violet.	C	669	Nigrosine IAA.	tM	700
Neutral Violet O.	M	U456	Nigrosine K.	By	700
New Acid Chrome Black R.	AW	A607	Nigrosine K 2 B.	GrE	700
New Chrome Black PK.	CV	275a	Nigrosine KSB.	GrE	700
New Blue B. G.	C	650	Nigrosine KW.	GrE	700
New Blue RR.	B	649	Nigrosine KWR.	GrE	700
New Blue RG.	By	649	Nigrosine L.	C	700
New Claret B.	B	A83	Nigrosine MS.	B	700
New Claret P.	B	A85	Nigrosine NBL.	By	700
New Claret R.	B	A86	Nigrosine NJKSB.	GrE	700
New Cocaine.	A	169	Nigrosine O.	WD	700
New Direct Blue S.	K	U368	Nigrosine OL.	K	668
New Ethyl Blue BS.	M	U457	Nigrosine SML.	K	668
New Ethyl Blue RS.	M	U458	Nigrosine SUL.	K	668
New Fast Blue F. H.	By	652	Nigrosine T.	B	700
New Fast Blue R.	I	652a	Nigrosine T.	tM	668
New Fast Blue RS.	I	652a	Nigrosine T.	WD	700
New Fast Gray.	By	681	Nigrosine TRT.	G	668

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Nigrosine TTR.....	tM	698	Orange 2 G.....	H	38
Nigrosine WG.....	B	700	Orange GC.....	K	139a
Nigrosine WL.....	B	700	Orange GD.....	L	144a
Nigrosine WLA.....	B	700	Orange GRX.....	B	37
Nigrosine WLAN.....	B	700	Orange GS.....	H	139
Nigrosine WLASSB.....	B	700	Orange GT.....	By	70
Nigrosine WLASG.....	B	700	Orange N.....	I	139
Nigrosine WLG.....	B	700	Orange NA.....	GrE	79a
Nigrosine WLN.....	B	700	Orange PC.....	DH	145a
Nigrosine WLP.....	B	700	Orange R.....	B	151
Nigrosine WLY.....	B	700	Orange R.....	(Sch)	151
Nigrosine 8307.....	CJ	700	Orange 2 R.....	K	139a
Nigrosine 4614.....	CJ	700	Orange RO.....	B	151a
Nigrosine 11029.....	WD	700	Orange RO.....	By	A277
Nigrosine 14029.....	S	700	Orange S.....	B	144
Nigrosine 16633.....	WD	700	Orange TA.....	A	311
Nigrosine 16635.....	Q	698	Orange X.....	H	37a
Nigrosine 18872.....	tM	698	Orange I.....	B	144
Nigrosine Base.....	WD	698	Orange I.....	By	144
Nigrosine Base 2 B.....	tM	698	Orange I.....	tM	144
Nigrosine C base.....	B	700	Orange II.....	B	145
Nigrosine Base R.....	tM	698	Orange II.....	(CDCo)	145
Nigrosine Black.....	H	698	Orange II.....	(H&M)	145
Nigrosine Black B.....	GrE	700	Orange II.....	K	145
Nigrosine Crystals 146.....	K	700	Orange II.....	(WB)	145
Nigrosine Crystals 1966.....	K	700	Orange II P.....	B	145
Nigrosine Crystals WS.....	K	700	Orange No. 3.....	P	47
Nigrosine Oil 5781.....	GrE	698	Orange IV.....	B	139
Nigrosines from aniline (indulines).....	(Sch)	699	Orange IV.....	G	139
Nigrosines from nitrobenzol.....	(Sch)	700	Orange IV.....	K	139
Nile Blue A.....	B	653	Orange 4.....	P	139
Nile Blue B.....	B	653	Orange IV.....	tM	139
Nile Blue 2 B.....	B	654	Orange 13.....	S	58c
Nile Blue R.....	B	653	Orange 14.....	S	58c
Nitro Azomine Green F.....	CV	A730	Orange 67 (V. M.).....	C	38
Nitrosamine Pink BKF.....	A	34	Orange 227.....	Q	36b
Nyanza Black B.....	A	345	Orange 23961.....	S	58c
Oil Black (V. M.).....	CJ	U495	Orange Crystals.....	AW	38
Oil Black (V. M.).....	K	U369	Orange Crystals 2 G.....	WD	38
Oil Black 6 B.....	B	U163	Orange Red pure.....	A	174
Oil Black 6 G.....	B	U164	Orchil RCEP.....	A	U48
Oil Black HG.....	B	U165	Orchil OPAG.....	A	U47
Oil Black 11410.....	H	U759	Orchil RPH.....	A	U49
Oil Black 26694.....	H	U759	Oriel Yellow EC.....	G	109
Oil Blue.....	B	U166	Orelline BB.....	By	253
Oil Blue Black 114.....	K	U370	Ortho Black 3 B.....	A	A37
Oil Brown BG.....	K	U371	Ortho Cyanine B.....	A	A38
Oil Color Brown.....	H	U760	Ortho Cyanine 6 G.....	A	A39
Oil Color Canary.....	H	U761	Oxamine Acid Brown G.....	B	A87
Oil Color Yellow.....	H	U762	Oxamine Black A.....	B	A88
Oil Orange (V. M.).....	K	U372	Oxamine Black BB.....	B	A89
Oil Orange AR.....	K	U372	Oxamine Black BHN.....	B	333
Oil Orange LG.....	I	36a	Oxamine Black BHX.....	B	333
Oil Orange R.....	B	U167	Oxamine Black BBNX.....	B	A90
Oil Orange 3 R.....	B	U168	Oxamine Black BRTX.....	B	A91
Oil Orange 2311.....	(Sch)	36	Oxamine Black RN.....	B	A92
Oil Red (V. M.).....	K	U373	Oxamine Blue A.....	B	410
Oil Red B.....	B	U169	Oxamine Blue AX.....	B	410
Oil Red G.....	B	U170	Oxamine Blue B.....	B	421
Oil Red 7327.....	CJ	U494	Oxamine Blue 3 B.....	B	421a
Oil Yellow.....	H	32b	Oxamine Blue BG.....	B	421a
Oil Yellow (V. M.).....	K	U374	Oxamine Blue GNX.....	B	421a
Oil Yellow A.....	(Sch)	31	Oxamine Blue 3 R.....	B	421a
Oil Yellow G.....	B	U171	Oxamine Blue 4 R.....	B	385
Oil Yellow R.....	B	U172	Oxamine Brilliant Red BX.....	B	A93
Oil Yellow 2338.....	(Sch)	36a	Oxamine Brilliant Violet RX.....	B	A94
Oil Yellow 2625.....	(Sch)	32	Oxamine Brown A.....	B	A95
Oil Yellow 2681.....	(Sch)	68	Oxamine Brown B.....	B	A96
Oil Yellow 7869.....	I	32a	Oxamine Brown 3 G.....	B	A97
Old Gold.....	Q	U804	Oxamine Brown GR.....	B	A98
Oleate Green O.....	Q	U805	Oxamine Brown GX.....	B	A99
Omega Chrome Cyanine R.....	S	U711	Oxamine Brown 3 GX.....	B	A100
Omega Chrome Red B.....	S	U712	Oxamine Brown R.....	B	344
Omega Chrome Black.....	S	85	Oxamine Brown RG.....	B	344
Opal Blue.....	M	521	Oxamine Claret B.....	B	A101
Opaline Blue R.....	I	U679	Oxamine Copper Blue RR.....	B	A102
Orange A.....	(Sch)	145	Oxamine Copper Blue RRX.....	B	A103
Orange D.....	B	37a	Oxamine Dark Blue BGX.....	B	A105
Orange G.....	A	38	Oxamine Dark Blue BGE.....	B	A104
Orange G.....	B	38	Oxamine Dark Blue BRX.....	B	A107
Orange G.....	K	139a	Oxamine Dark Blue R.....	B	A106
Orange G.....	M	38	Oxamine Dark Brown G.....	B	A108
			Oxamine Dark Brown R.....	B	A109

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Oxamine Fast Blue 6 VX.....	B	A110	Paper Blues, green shades.....	(Sch)	537
Oxamine Fast Blue RR.....	B	A111	Paper Blues, red shades.....	(Sch)	537
Oxamine Fast Pink BX.....	B	A112	Paper Brown BB.....	B	U176
Oxamine Fast Red F.....	B	343	Paper Brown BL.....	B	U176
Oxamine Green BX.....	B	474	Paper Brown RT.....	B	U177
Oxamine Green GX.....	B	475	Paper Fast Bordeaux B.....	By	U255
Oxamine Light Blue B.....	B	A113	Paper Green D.....	K	U375
Oxamine Light Blue GX.....	B	A114	Paper Orange CR.....	K	U376
Oxamine Light Brown G.....	B	A115	Paper Orange residue.....	K	U377
Oxamine Light Brown R.....	B	A116	Paper Scarlet (V.M.).....	K	U378
Oxamine Light Green B.....	B	A117	Paper Yellow.....	WD	303a
Oxamine Light Green G.....	B	A118	Paper Yellow G.....	B	303a
Oxamine Light Green 3 G.....	B	A119	Paper Yellow GGX.....	B	303a
Oxamine Maroon.....	B	345	Paper Yellow 3 GX.....	B	303
Oxamine Pure Blue 6 BXX.....	B	424	Paper Yellow RXX.....	B	303a
Oxamine Red.....	B	346	Paper Yellow 3 RXX.....	B	303a
Oxamine Red 3 B.....	B	346	Paper Yellow 03995.....	B	303a
Oxamine Red BNX.....	B	346	Paper Yellow 22812.....	B	303a
Oxamine Violet.....	B	326	Paper Yellow 33598.....	B	303a
Oxamine Yellow A.....	B	A120	Para Black B.....	By	A278
Oxamine Yellow 3 G.....	B	A121	Para Blue.....	CG	702
Oxy Acid Red 6 BO.....	GrE	U512	Para Brilliant Orange G.....	By	A282
Oxy Chlorazol Blue B.....	H	A760	Para Brown GK.....	By	A279
Oxy Diamine Black (V. M.).....	C	A382	Para Brown RK.....	By	A280
Oxy Diamine Blue (V. M.).....	C	A383	Para Brown SC.....	By	A281
Oxy Diamine Brown (V. M.).....	C	A384	Para Diamine Black (V.M.).....	C	A388
Oxy Diamine Carbon (V. M.).....	C	A385	Para Green 2 BL.....	By	A283
Oxy Diamine Orange (V. M.).....	C	362	Para-Fuchsin.....	GrE	511
Oxy Diamine Red S.....	C	A396	Para Orange G.....	By	A284
Oxy Diamine Violet (V. M.).....	C	326	Para Yellow.....	AW	U588
Oxy Diamine Yellow.....	C	198	Paramine.....	B	U178
Oxy Diaminogen (V. M.).....	C	A387	Paraphenylene Blue R.....	WD	701
Oxychrome Black F.....	GrE	A467	Paraphenylene Violet.....	WD	695
Oxychrome Blue Black BGO.....	GrE	A468	Paraphosphine (V.M.).....	C	U294
Oxychrome Brown V.....	GrE	A469	Paratol Chrome Yellow L.....	M	U480
Oxychrome Brown VA.....	GrE	A470	Paratol Fast Yellow G.....	M	U481
Oxychrome Brown VN.....	GrE	A471	Paratol Lake Red KP.....	M	U482
Oxychrome Yellow D.....	GrE	A472	Paratol Lake Red LC.....	M	U483
Oxychrome Yellow DG.....	GrE	A473	Paratol Lake Red LP.....	M	U484
Oxychrome Yellow 2 G.....	GrE	A474	Paratol Scarlet 3 B.....	M	U485
Oxyphenine A.....	ClCo	617	Paratol Scarlet 3 BX.....	M	U485
Oxyphenine C.....	ClCo	617	Parazole Brown RK.....	K	U379
Oxyphenine GG.....	ClCo	617	Paris Violet.....	P	515
Oxyphenine R.....	ClCo	617	Paris Violet 3 B.....	P	515
Pacific Blue.....	H	540	Paris Violet 6 B.....	P	515
Palatine Black 4 B.....	B	220	Paris Violet 3 BA.....	P	515
Palatine Black 3 GX.....	B	220	Paris Violet 4 BA.....	P	515
Palatine Black MZ.....	B	220	Paris Violet 4 R.....	P	515
Palatine Black SF.....	B	220	Paris Violet 90.....	P	515
Palatine Black SFM.....	B	220	Patent Alizarin Black DEB.....	M	807a
Palatine Chrome Black.....	B	288	Patent Alizarin Black DFF.....	M	807a
Palatine Chrome Black 6 BX.....	B	181	Patent Alizarin Black DFFA.....	M	807a
Palatine Chrome Black F.....	B	288	Patent Black (V.M.).....	C	U295
Palatine Chrome Black S.....	B	289	Patent Blue A.....	K	545
Palatine Chrome Blue BB.....	B	A122	Patent Blue A.....	M	545
Palatine Chrome Blue W 2 B.....	B	A123	Patent Blue AE.....	M	545
Palatine Chrome Brown 5 G.....	B	154a	Patent Blue B.....	A	543
Palatine Chrome Brown GGTX.....	B	154a	Patent Blue B.....	M	543
Palatine Chrome Brown GX.....	B	154a	Patent Blue L.....	M	543
Palatine Chrome Brown R.....	B	154a	Patent Blue LE.....	M	543
Palatine Chrome Brown W.....	B	154	Patent Blue NO.....	M	543
Palatine Chrome Brown WN.....	B	154	Patent Blue V.....	G	543
Palatine Chrome Brown WNR.....	B	154	Patent Blue V.....	M	543
Palatine Chrome Brown WNRTX.....	B	154	Patent Blue V.....	tM	543
Palatine Chrome Green G.....	B	A124	Patent Blue V new.....	M	543
Palatine Chrome Green GX.....	B	A125	Patent Blue J 3.....	M	543a
Palatine Chrome Red B.....	B	202	Patent Blue JI.....	M	543a
Palatine Chrome Red R.....	B	A126	Patent Blue WE.....	M	543a
Palatine Chrome Violet.....	B	156	Patent Marine Blue.....	M	543
Palatine Light Yellow R.....	B	A127	Patent Marine Blue LER.....	M	543b
Palatine Orange R.....	B	A128	Patent Phosphine G.....	I	606c
Palatine Red A.....	B	109	Patent Phosphine M.....	I	606c
Palatine Scarlet A.....	B	81	Patent Phosphine R.....	I	606c
Palatine Scarlet G.....	B	81a	Patent Phosphine 19332.....	I	606c
Palatine Scarlet 3 R.....	B	81a	Pegu Brown G.....	L	A511
Palatine Scarlet 4 R.....	B	81a	Perl Wool Blue.....	C	87
Palatints.....	B	U173	Permanent Blue GR.....	CG	U493
Panama Black 3 G.....	(Sch)	436	Permanent Orange R.....	A	131
Panama Black R.....	(Sch)	436	Permanent Red B.....	A	152a
Paper Blue 6 G.....	(Sch)	537	Permanent Red 2 B.....	A	152a
Paper Blue MD.....	M	U459	Permanent Red 4 B.....	A	152
Blue TRR.....	B	U174	Permanent Red R.....	A	152a
Blue 33598.....	B	U713	Permanent Red 4 R.....	A	152a

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Persian Red RD.....	B	U179	Ponceau 4 R.....	P	169
Phenamine Blue G.....	B	A129	Ponceau 6 R.....	M	170
Phenanthrene Chrome Blue.....	I	U680	Ponceau 3 RB.....	A	247
Phenochrome Yellow.....	K	U380	Ponceau 4 RB.....	A	249
Phenocyanine TC.....	DH	642	Ponceau 6 RB.....	A	255
Phenocyanine TV.....	DH	643	Ponceau 10 RB.....	A	259
Phenyl Crimson S.....	CV	A731	Ponceau RL.....	A	82a
Phenylamine Black 4 B.....	By	A285	Ponceau 2 RL.....	A	82a
Phthaldehyde Yellow 2 G.....	A	606	Ponceau 2 RL.....	By	82
Phloxine.....	DH	593	Ponceau 3 RL.....	A	82a
Phloxine B.....	M	596	Ponceau 2 RLH.....	A	82a
Phloxine GA.....	M	596	Ponceau S.....	A	247a
Phloxine HM.....	M	596	Ponceau SPJ.....	P	169b
Phloxine P.....	B	593	Ponceau S 2 R.....	B	82
Phoenix Brown D.....	A	U58	Ponceau W 3 R.....	P	169b
Phosphine (V. M.).....	C	606	Ponceau X.....	BK	82b
Phosphine A.....	GrE	606	Ponceau 12402.....	I	175a
Phosphine AR.....	tM	606	Ponceau for Silk.....	P	175
Phosphine GG.....	tM	606	Ponceau (free from arsenic).....	WD	82c
Phosphine GO.....	K	606	Prague Alizarin Yellow G.....	KI	49
Phosphine LM.....	M	606	Primal Black.....	A	U59
Phosphine LB.....	GrE	606	Primazine Yellow G.....	B	A130
Phosphine O.....	M	606	Primuline.....	A	616
Phosphine PHLB.....	GrE	606	Primuline.....	C	616
Phosphine 3 R.....	A	606	Primuline.....	GrE	616
Phosphine RS.....	II	606	Primuline A.....	B	616
Phosphine 12901.....	P	606	Primuline A.....	M	616
Picric Acid.....	.....	5	Primuline 1329.....	ClCo	616
Pigment Black.....	B	U180	Primuline 4502.....	K	616
Pigment Black BP.....	B	U181	Primuline 19301.....	I	616
Pigment Chlorine.....	M	8	Primuline Yellow.....	AW	616a
Pigment Chrome Yellow L.....	M	21	Primuline Yellow.....	By	616a
Pigment Fast Yellow G.....	M	28	Printing Black for Wool.....	B	776
Pigment Fast Yellow R.....	M	24	Printing Blue for Wool.....	B	742
Pigment Orange R.....	M	72	Printing Yellow (greenish).....	K	U382
Pigment Scarlet G.....	M	201	Prune 516.....	Lev	636
Pinachrome.....	M	613a	Prune pure.....	S	636
Pinacyanol.....	M	U466	Pure Blue AI.....	I	539
Pink.....	K	U381	Pure Blue DS.....	II	539
Pink B.....	I	U681	Pure Blue DSG.....	H	539
Pink M.....	II	U763	Pure Blue RT.....	BK	539b
Pink Color.....	Q	U806	Pure Soluble Blue.....	C	539
Pluto Black A.....	By	A286	Pure Yellow DG.....	K	U383
Pluto Black BS.....	By	A287	Purpurin (synthetic).....	B	783
Pluto Black CF.....	By	A288	Pyramidol Brown BG.....	FA	317
Pluto Black F.....	By	A289	Pyramidol Brown T.....	FA	376
Pluto Black G.....	By	A290	Pyramine Orange 2 GX.....	B	362a
Pluto Black SS.....	By	A291	Pyramine Orange 3 G.....	G	366
Pluto Brown GG.....	By	A292	Pyramine Orange R.....	B	360
Pluto Brown NB.....	By	A293	Pyramine Orange RR.....	B	314
Pluto Brown R.....	By	A294	Pyramine Orange RT.....	B	362
Pluto Milling Black B.....	By	A295	Pyramine Yellow GXS.....	B	364
Pluto Orange G.....	By	A296	Pyramine Yellow GXSC.....	B	364
Plutoform Black 3 GL.....	By	A296	Pyramine Yellow GXSP.....	B	364
Polar Orange GS.....	Q	U633	Pyramine Yellow R.....	B	191
Polar Red 3 B.....	G	U635	Pyrazole Orange G.....	S	A721
Polar Red G.....	G	U636	Pyrazole Orange R.....	S	A722
Polar Red R.....	G	U637	Pyrogallol-cyanine-sulphonicacids.....	DH	623
Polar Red RS.....	G	U638	Pyrogene Black G.....	I	730
Polar Yellow G.....	G	U639	Pyrogene Blue RR.....	I	726
Polar Yellow 2 G.....	G	U640	Pyrogene Blue 2 RN.....	I	726
Polar Yellow R.....	G	U641	Pyrogene Blue Green B.....	I	746
Polar Orange RC.....	G	U634	Pyrogene Brown D.....	I	8155
Polychromine AC.....	G	616	Pyrogene Brown G.....	I	8156
Polyphenyl Black BVC.....	G	A650	Pyrogene Brown GX.....	I	8157
Polyphenyl Black GNC.....	G	A651	Pyrogene Brown OR.....	I	8158
Polyphenyl Blue GC.....	G	A652	Pyrogene Brown ORR.....	I	8159
Polyphenyl Blue GF.....	G	A653	Pyrogene Brown 4 R.....	I	8160
Polyphenyl Brilliant Blue 3 G.....	G	A654	Pyrogene Cutch DE.....	I	8161
Polyphenyl Fast Red BC.....	G	A655	Pyrogene Cutch 2 GO.....	I	8162
Polyphenyl Orange RC.....	G	A656	Pyrogene Cutch 2 R.....	I	8163
Polyphenyl Yellow 3 GC.....	G	A657	Pyrogene Deep Black C.....	I	720I
Ponceau (V. M.).....	K	83a	Pyrogene Deep Black D.....	I	720I
Ponceau BO.....	A	227	Pyrogene Deep Black G.....	I	720I
Ponceau G.....	M	39	Pyrogene Direct Blue.....	I	726
Ponceau 4 GB.....	A	37	Pyrogene Direct Blue RL.....	I	726
Ponceau K.....	I	175a	Pyrogene Green 2 G.....	I	709
Ponceau 2 R.....	P	82	Pyrogene Indigo.....	I	735
Ponceau 2 R.....	Q	82	Pyrogene Indigo CL.....	I	735
Ponceau 2 R.....	tM	82	Pyrogene Indigo 5 G.....	I	735
Ponceau 3 R.....	By	83	Pyrogene Indigo GL.....	I	735
Ponceau 3 R.....	Lev	83	Pyrogene Indigo R.....	I	735
Ponceau 3 R.....	(WB)	83	Pyrogene Indigo RR.....	I	735

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Pyrogen Orange R.	I	8164	Rhodamine B.	K	573
Pyrogen Yellow M.	I	734	Rhodamine B.	I	573
Pyrogen Yellow O.	I	734	Rhodamine B.	S	573
Pyrol Brown G.	L	8135	Rhodamine 3 B.	I	574
Pyrol Brown 69181.	L	8136	Rhodamine BN.	Q	573
Pyrol Brown (yellowish).	L	8135	Rhodamine G.	B	572
Pyronine G.	L	568	Rhodamine 3 G.	B	576
Pyrophosphine C.	WD	U547	Rhodamine 5 G.	By	576a
Quercitron Substitute V.	B	U184	Rhodamine 5 G.	B	572a
Quercitron Substitute WBL.	B	U183	Rhodamine 6 G.	B	571
Quinoline Blue.	G	611	Rhodamine 6 G.	I	571
Quinoline Red.	A	610	Rhodamine 12 GF.	I	578
Quinoline Yellow.	A	612	Rhodamine 6 GN.	B	571
Quinoline Yellow.	AW	613	Rhodamine 8.	B	570
Quinoline Yellow.	B	612	Rhodamine 8.	I	570
Quinoline Yellow.	By	613	Rhodamine H.	I	572a
Quinoline Yellow.	C	613	Rhodamine 632.	Q	572a
Quinoline Yellow.	I	613	Rhodamine Scarlet G.	By	576b
Quinoline Yellow.	M	613	Rhodine 2 G.	I	577
Quinoline Yellow.	S	612	Rhodine 12 GM.	I	575
Quinoline Yellow K.T.	By	613	Rhoduline Blue 6 G.	By	U258
Quinoline Yellow N.	By	613	Rhoduline Heliotrope 3 B.	By	U259
Quinoline Yellow O.	M	613	Rhoduline Orange N.	By	603a
Quinoline Yellow P.	B	612	Rhoduline Orange NO.	By	603a
Quinoline Yellow 9272.	I	612	Rhoduline Violet.	By	684
Quinoline Yellow, water soluble.	A	613	Rhoduline Yellow 6 G.	By	618a
Radial Yellow G.	B	30	Roccelline.	C	161
Rapid Filter Green I.	M	U467	Roccelline.	FA	161
Rapid Filter Red I.	M	U468	Roccelline FS.	H	161
Raven Black 34588.	H	U764	Roccelline MB.	tM	161
Red (V. M.).	CJ	U497	Roccelline S.	G	161
Red PC.	DH	U600	Roccelline S.	tM	161
Red PC.	G	U642	Rosanthrene A WL.	I	A704
Red 2 S.	P	483a	Rosanthrene B.	I	A705
Red Blue BSR.	GRE	U513	Rosanthrene CB.	I	A706
Red Brown.	S	106c	Rosanthrene R.	I	A707
Red Color.	Q	U807	Rosanthrene Bordeaux B.	I	A708
Red Coraline.	A	556	Rosanthrene Orange 16754.	I	A709
Red for Leather O.	M	U469	Rosanthrene Violet SR.	I	A710
Red for Leather R.	A	U60	Rosazaine B.	M	U470
Red Lake RL.	By	U256	Rosazaine B 5.	M	U471
Red Lake RMT.	By	U257	Rosazaine 6 G.	M	U472
Red Scarlet.	Q	U808	Rosazurine B.	By	373
Red Violet.	tM	514	Rosazurine G.	By	371
Red Violet 5 RS.	B	525	Rose (V. M.).	CJ	U496
Reddish Brown.	K	U384	Rose Bengale.	DH	596
Renol Black BHN.	tM	462b	Rose Bengale.	G	597
Renol Black SF.	tM	462b	Rose Bengale.	M	597
Renol Black ST.	tM	462b	Rose Bengale.	S	595
Renol Blue B.	tM	410	Rose Bengale B.	B	597
Renol Bordeaux.	tM	A517	Rose Bengale B.	K	597
Renol Brilliant Yellow.	tM	303	Rose Bengale B.	M	597
Renol Brown MB.	tM	344	Rose Bengale N.	C	595
Renol Brown RA.	tM	344	Rose Bengale NTO.	B	595
Renol Dark Green NOONG.	tM	A518	Roseine B.	S	675
Renol Fast Red 4 B.	tM	A519	Rosinduline G.	K	612
Renol Green B.	tM	474	Rosinduline 2 G.	K	674
Renol Light Blue A.	tM	A520	Rosolane.	P	668
Renol Light Blue G.	G	A658	Rosolane O, T, R.	M	667
Renol Light Blue G.	tM	A521	Rosophenine.	CICo	483
Renol Orange 3 AP.	G	392a	Rosophenine SG.	CICo	195
Renol Orange 3 AP.	tM	392a	Rubine.	A	512
Renol Red.	tM	A522	Rubine N.	A	512
Renol Yellow 3 R.	tM	9	Rubine N.	B	U139
Renolamine Black BHN.	G	333	Rubramine.	CG	703
Renolamine Black BHN.	tM	333	Russian Leather Red R.	A	512
Resoflavin W.	B	771	Russian Red.	C	512
Resorectin Blue.	M	647	Safranine.	AW	679
Resorectin Brown.	AW	211	Safranine.	H	679
Resorectin Brown.	B	211	Safranine.	Q	679
Resorectin Brown.	BK	211	Safranine (V. M.).	C	679
Resorectin Brown.	H	211	Safranine B.	G	679
Resorectin Brown.	K	211	Safranine B.	M	679
Resorectin Brown.	(Sch)	211	Safranine B.	tM	679
Resorectin Brown.	WD	211	Safranine 6 B.	(Sch)	680
Resorectin Brown QV.	G	211	Safranine FF.	By	679
Resorectin Yellow.	(Sch)	143	Safranine F.	K	679
Rheonine AL.	B	607	Safranine FB.	B	679
Rheonine GD.	B	607	Safranine MN.	B	663
Rhodamine AL.	B	572a	Safranine O.	M	679
Rhodamine B.	AW	573	Safranine T.	B	679
Rhodamine B.	B	573	Safranine TK.	B	679
Rhodamine B.	By	573	Safranine Y.	(Sch)	679

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Safranine 1081.	K	679	Silk Blue BS 3 BB.	GrE	539a
Safranine bluish.	K	680	Silk Blue BT 5 BOO.	GrE	539a
Safranine (blue shade).	L	679	Silk Blue BTE.	GrE	539a
St. Denis Black.	P	718	Silk Blue BTR.	GrE	539a
Saïcine Black (V.M.).	K	181b	Silk Blue 4 R.	Q	539
Saïcine Black K.	K	181b	Silk Blue 4.	By	537
Saïcine Black L.R.	K	181b	Silk Blue 5770.	BK	559
Saïcine Black S.	K	181b	Silk Gray CB.	K	U386
Saïcine Black U.	K	181	Silk Gray 281.	K	U386
Saïcine Black UL.	K	181	Silk Wool Black 3 B.	M	U473
Saïcine Blue B.	K	A403	Silk Yellow N.	BK	U485
Saïcine Bordeaux R.	K	A404	Silk Yellow N.	Q	U811
Saïcine Brown (V.M.).	K	A405	Silver Gray N.	C	700
Saïcine Dark Green CS.	K	A406	Silver Gray P.	C	700
Saïcine Green CP.	K	A407	Sirius Yellow G.	B	758
Saïcine Orange 2 R.	K	A408	Sitara Fast Red RL.	tM	56
Saïcine Orange 2541.	K	A409	Sitara Orange I.	tM	A523
Saïcine Orange 2542.	K	A409	Solamine Blue B.	A	A444
Saïcine Red B.	K	A410	Solamine Red.	A	A446
Saïcine Red G.	K	A411	Solfigene Blue Green B.	I	U684
Saïcine Violet R.	K	A412	Solfigene Blue Green 16444.	I	U683
Saïcine Yellow (V.M.).	K	177b	Solfigene Cutch.	I	U685
Salmon Red.	A	120	Solfigene Cyanine.	I	U686
Scarlet.	(CDCo)	174	Solfigene Deep Black (V.M.).	I	U688
Scarlet (V.M.).	C	247	Solfigene Deep Black 14717.	I	U687
Scarlet AB.	GrE	A475	Solfigene Green GG.	I	U689
Scarlet 6 B.	GrE	A476	Solid Blue (V.M.).	C	U296
Scarlet BN.	B	A131	Solid Blue 3 R.	S	609
Scarlet C.	Q	196a	Solid Blue RX.	Q	609
Scarlet CA.	B	A132	Solid Blue SBAOOOO.	GrE	609
Scarlet GRCL.	M	174a	Solid Blue SBSOOO.	GrE	609
Scarlet GX.	K	U385	Solid Blue Base SBXBX.	GrE	609
Scarlet M.	M	174a	Solid Brown.	Q	U812
Scarlet 15 N.	B	A133	Solid Brown KF.	Q	U813
Scarlet P.	K	U385	Solid Brown O.	C	U474
Scarlet PO.	K	U385	Solid Green (V.M.).	M	495
Scarlet 2 PR.	K	U385	Solid Green 3 G.	Q	499
Scarlet R.	M	174a	Solid Green O.	M	1
Scarlet RR.	H	82	Solid Red B.	Q	U814
Scarlet 2 R.	K	U385	Solid Yellow G.	Q	137
Scarlet 2 R.	M	174a	Soluble Blue.	(ByCo)	537
Scarlet 2 R.	tM	176	Soluble Blue.	G	539
Scarlet 3 R.	M	174a	Soluble Blue.	(H&M)	537
Scarlet 4 R.	P	176a	Soluble Blue.	tM	539
Scarlet 4 R.	tM	176a	Soluble Blue (V.M.).	K	539
Scarlet 6 R.	M	174a	Soluble Blue AOOOO.	GrE	539
Scarlet 6 R crystals.	BK	223b	Soluble Blue B.	CG	539
Scarlet 2 RCL.	M	174a	Soluble Blue BCBII.	CG	539
Scarlet 3 RCL.	M	174a	Soluble Blue BLSE.	P	539
Scarlet RD.	H	82d	Soluble Blue 3 BS.	P	539
Scarlet 4 RI.	AW	106b	Soluble Blue BS 3 BB.	GrE	539
Scarlet 2 RII.	AW	106a	Soluble Blue BSJ.	GrE	539
Scarlet 4 RZ.	M	174a	Soluble Blue C2.	K	539
Scarlet 8 2 R.	B	A134	Soluble Blue C3.	K	539
Scarlet 8 3 R.	B	A135	Soluble Blue C5.	K	539
Scarlet 2 SRM.	B	A136	Soluble Blue CX.	K	539
Scarlet X.	K	U385	Soluble Blue ELOOO.	GrE	539
Scarlet XX.	K	U385	Soluble Blue HA.	B	539
Scarlet XK.	Q	U810	Soluble Blue IN.	B	539
Scarlet 60.	H	169	Soluble Blue 4 R.	B	539
Scarlet 231.	CJ	76a	Soluble Blue 5 R.	tM	539
Scarlet 243.	CJ	76a	Soluble Blue RM.	M	539
Scarlet 1610.	K	U385	Soluble Blue TB.	B	539
Scarlet 7214.	B	A137	Soluble Blue TL.	B	539
Scarlet 63446.	A	U61	Soluble Blue 3376.	B	539
Scarlet (yellow shade) 17413.	B	A138	Soluble Blue 14108.	B	539
Scarlet (yellow shade) 24211.	B	A139	Soluble Blue 14710.	B	539
Scarlet for silk S.	P	247c	Soluble Blue 23413.	B	539
Scarlet residue.	K	U385	Soluble Blue base SBXR.	GrE	539
Seal Brown W.	P	U594	Soluble Blue crystals.	tM	539
Sella Brilliant Yellow P.	G	U643	Soluble Blue (greenest shade).	tM	539
Sella Flavine G.	G	U644	Soluble Navy Blue.	G	539c
Sepia Black FW.	I	U682	Sorbin Red.	B	64
Sepia Black 14998.	I	U682	Sorbin Red X.	B	64
Serge Blue.	A	539	Special Blue G.	B	U190
Setocyanine.	G	500	Special Phosphine G.	S	606
Setoglaucine.	G	496	Spirit Black.	G	U645
Setopaline.	G	500	Spirit Black (V.M.).	CJ	U499
Silk Blue.	tM	539a	Spirit Blue BVE.	P	521
Silk Blue B.	B	537	Spirit Blue R.	M	521
Silk Blue B.	BK	559	Spirit Blue, green shades.	(Sch)	521
Silk Blue B.	Q	539	Spirit Blue, red shades.	(Sch)	521
Silk Blue BJBNOO.	GrE	539a	Spirit Jet Nigrosine 24618.	CJ	698

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Spirit Nigrosine	WD	698	Sulphur Black T	A	720
Spirit Nigrosine L.M.	H	698	Sulphur Black TFA	A	720A
Spirit Nigrosine P	H	698	Sulphur Black TR	A	720A
Stanley Red	ClCo	198	Sulphur Black TG	A Lev	720Lev
Steam Green G	B	U191	Sulphur Black TS	K	720K
Stilbene Yellow 3 G	ClCo	10	Sulphur Black 5274	K	720K
Stilbene Yellow 3 G	CR	10	Sulphur Black 5276	K	720K
Stilbene Yellow 2 GP	B	10	Sulphur Black 5285	K	720K
Stilbene Yellow 3 GPX	B	10	Sulphur Black 5289	K	720K
Stilbene Yellow GX	B	10	Sulphur Black 108583	A	720A
Stilbene Yellow RX	B	10a	Sulphur Black Brown N	A	81
Stilbene Yellow 5012	B	10b	Sulphur Black Brown NR	A	82
Straw Blue G	By	U260	Sulphur Blue B	A	83
Sudan G	A	35	Sulphur Blue BE	BK	8123
Sudan 2 G	A	35	Sulphur Blue BG	K	883
Sudan R	A	93	Sulphur Blue CHL	K	883
Sudan I	A	36	Sulphur Blue D	K	84
Sudan II	A	76	Sulphur Blue G	K	883
Sudan III	A	223	Sulphur Blue L	A	86
Sudan III	(CDCo)	223	Sulphur Blue PR	A	87
Sudan IV	A	232	Sulphur Blue R	A	88
Sudan IV	(CDCo)	232	Sulphur Blue 2 R	A	89
Sudan Brown	A	105	Sulphur Blue 4 R	A	810
Sudan Brown S	(Sch)	105	Sulphur Blue RB	BK	8124
Sulphamine Brown A	WD	107	Sulphur Blue U	K	883
Sulphamine Brown B	WD	116	Sulphur Brilliant Green GK	A	811
Sulphaniline Brown O	K	708	Sulphur Bronze 136	A	8168
Sulphaniline Brown R	K	708	Sulphur Bronze 158	Lev	8169
Sulphine Blue B	CG	8125	Sulphur Brown CL 4 R	A	812
Sulphine Blue RR	CG	8126	Sulphur Brown G	A	813
Sulphine Brown	LD	707	Sulphur Brown 2 G	A	814
Sulphine Brown B	CG	737	Sulphur Brown 6 G	A	815
Sulphine Brown G	CG	737	Sulphur Brown M	I	8165
Sulpho Blacks B, 2 B	H	744	Sulphur Brown O	A	816
Sulpho Green B	NF	U550	Sulphur Brown OD	A	817
Sulpho Green C	NF	U550	Sulphur Brown 527	Lev	8170
Sulpho Rosazefine B	M	U475	Sulphur Brown 731	Lev	8171
Sulpho Rosazefine G	M	U476	Sulphur Brown (bluish)	K	884
Sulphogene Brown G, D	I	757	Sulphur Brown (reddish)	K	884
Sulpholine G	AW	U589	Sulphur Catechu G	A	818
Sulpholine G	K	U387	Sulphur Catechu R	A	819
Sulpholine R	AW	U590	Sulphur Coriath B	A	820
Sulphon Acid Black N 2 B	By	U261	Sulphur Coriath CLB	A	821
Sulphon Acid Blue B	By	189	Sulphur Green 2 BK	A	822
Sulphon Acid Blue R	By	188	Sulphur Green 4 BK	A	823
Sulphon Acid Green B	By	U262	Sulphur Green G	A	824
Sulphon Black 3 B	By	256	Sulphur Green 4 GK	A	825
Sulphon Black G	By	242	Sulphur Green 309	Lev	8172
Sulphon Orange G	By	A297	Sulphur Green 330	Lev	8173
Sulphon Orange 5 G	By	A297	Sulphur Indigo BA	A	826
Sulphon Violet R	By	A298	Sulphur Indigo CL	A	828
Sulphon Yellow 5 G	By	A299	Sulphur Indigo CLGG	A	829
Sulphon Yellow R	By	A299	Sulphur Indigo Blue RCL	K	885
Sulphonazurine	By	361	Sulphur Indigo Blue 827	K	885
Sulphoneyanine BB	B	257a	Sulphur Olive	S	8167
Sulphoneyanine G	By	257	Sulphur Olive B	A	830
Sulphoneyanine GR	B	257a	Sulphur Red Brown 2 RK	A	831
Sulphoneyanine GR	By	257	Sulphur Red Brown 6 RK	A	832
Sulphoneyanine 5 R	B	257a	Sulphur Violet R	A	833
Sulphoneyanine 5 R	By	257	Sulphur Violet Y	K	834
Sulphoneyanine 5 RT	By	257	Sulphur Yellow ES	K	U388
Sulphoneyanine SR	B	257a	Sulphur Yellow G	A	835
Sulphoneyanine Black B	By	265	Sulphur Yellow G	K	U388
Sulphoneyanine Black BB	B	265a	Sulphur Yellow 4 G	A	836
Sulphoneyanine Black 2 B	By	265	Sulphur Yellow I	A	837
Sulphoneyanine Black GR	B	265a	Sulphur Yellow R	A	838
Sulphur Black	A	720A	Sulphur Yellow R	I	8166
Sulphur Black A	A	720A	Sultan 5 B	H	263
Sulphur Black A W	A	720A	Sultan 10 B	H	406
Sulphur Black A WL	A	720A	Sultan Orange DS	H	304D
Sulphur Black B	A	720A	Sultan Yellow H	H	304
Sulphur Black 2 B	A	720A	Sun Yellow G	S	9
Sulphur Black 2 B	K	720K	Sun Yellow 3 GO	G	9
Sulphur Black 4 B	A	720A	Sun Yellow RR	S	9
Sulphur Black BRH	K	720K	Supramine Brown R	By	U263
Sulphur Black BRH	K	720K	Supramine Yellow R	By	U264
Sulphur Black FAG	A	720A	Tabora Black X	A	445
Sulphur Black FT	A	720K	Tannin Heliotrope	C	685
Sulphur Black GF	K	720K	Tannin Orange	C	74
Sulphur Black H	A	720A	Tartrazine	AW	26
Sulphur Black JBL	A	720A	Tartrazine	By	26
Sulphur Black KCB	K	720K	Tartrazine	BK	26
Sulphur Black MA	K	720K	Tartrazine	I	43



Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Tartrazine.....	S	23	Thion Purple O.....	K	892
Tartrazine G.....	B	23	Thion Violet.....	K	893
Tartrazine X.....	B	23	Thion Violet Black.....	K	720K
Tartrazine XX.....	B	23	Thion Yellow (V. M.).....	K	896
Terra Cotta FC.....	G	209	Thion Yellow 2 G.....	K	894
Terra Cotta RGN.....	G	58	Thion Yellow 5 G.....	K	895
Tetra Cyanole (V. M.).....	C	543d	Thional Black G.....	S	719
Thiazine Blue.....	G	A659	Thional Red Brown.....	S	747
Thiazine Brown R.....	B	U192	Thionine Blue GO.....	A	661
Thiazine Red G.....	B	197	Thionine Blue GO.....	M	661
Thiazine Red R.....	B	194	Thionine Blue OO.....	A	661
Thiazine Yellow G.....	By	198	Thionine Blue 3O.....	A	661
Thiazine Yellow 3 G.....	By	198	Thionol Black S.....	Lev	720Lev
Thiazine Yellow GL.....	By	198	Thionol Black XX.....	Lev	720Lev
Thiazol Yellow.....	S	198	Thiophenol Black T.....	I	720
Thiazol Yellow RH.....	By	51	Thiophor Black WLN.....	CJ	720CJ
Thio Catechine.....	F	715	Thiophor Blue B.....	CJ	8127
Thio Cotton Black.....	WD	721	Thiophor Bronze 5 G.....	CJ	713
Thio Indigo Brown G.....	K	904	Thiophor Dark Brown B.....	CJ	8128
Thio Indigo Brown 2 R.....	K	902	Thiophor Deep Green CG.....	CJ	8129
Thio Indigo Orange R.....	K	913	Thiophor Indigo CJ.....	CJ	734
Thio Indigo Pink 247.....	K	910	Thiophor Khaki.....	CJ	8130
Thio Indigo Pink 2475.....	K	910	Thiophor Orange O.....	CJ	8131
Thio Indigo Red B.....	K	912	Thiophor Yellow R.....	CJ	8132
Thio Indigo Red 3 B.....	K	918	Thiophor Yellow Bronze G.....	CJ	714
Thio Indigo Rose AN.....	K	910	Thiophor Yellow Olive.....	CJ	8132a
Thio Indigo Rose BN.....	K	910	Thioxine Black AB0000.....	GRE	720GRE
Thio Indigo Scarlet R.....	K	906	Thioxine Black AB000000.....	GRE	720GRE
Thio Indigo Scarlet G.....	K	905	Thioxine Black 3 B000.....	GRE	720GRE
Thio Indigo Scarlet S.....	K	916	Thioxine Black GB.....	GRE	720GRE
Thio Indigo Scarlet 6086.....	K	916	Thioxine Black 1151.....	GRE	720GRE
Thio Indigo Violet 2 B.....	K	920	Thioxine Black 3705.....	GRE	720GRE
Thio Indigo Violet K.....	I	900	Thioxine Brown 5 G.....	GRE	8133
Thio Indigo Yellow 3 GN.....	K	913a	Thioxine Brown 2 GR.....	GRE	8134
Thio Vesuvine BB.....	Q	U815	Titan Como 2 B.....	H	A 761
Thiocarbonyl NNG.....	C	720	Titan Como R.....	H	A 762
Thiocarmine R.....	C	662	Titan Fast Black B.....	H	A 763
Thioflavine (V. M.).....	C	618	Titan Orange.....	H	A 764
Thioflavine OIO.....	K	613	Titan Red.....	H	196
Thioflavine S.....	S	613	Titan Scarlet Y.....	H	196
Thioflavine 6.4.....	K	615	Titan Yellow Y.....	H	198
Thiogene Black BB.....	M	720M	Tolamine Violet.....	I	U690
Thiogene Black 5 B.....	M	720M	Tolamine Red B, G.....	K	43
Thiogene Black MA.....	M	720M	Toluidine Blue.....	M	659a
Thiogene Black MM.....	M	720M	Toluidine Black G00.....	GRE	A 477
Thiogene Black ML.....	M	720M	Toluyene Brown G.....	GRE	265
Thiogene Black MZ.....	M	720M	Toluyene Brown R.....	GRE	488
Thiogene Blue R.....	M	899	Toluyene Fast Brown 2 R.....	By	U266
Thiogene Blue R.....	M	897	Toluyene Fast Brown 3 G.....	By	U265
Thiogene Blue 2 R.....	M	898	Toluyene Fast Orange GL.....	By	392d
Thiogene Cyanine B.....	M	8107	Toluyene Orange G.....	A	392
Thiogene Cyanine G.....	M	8108	Toluyene Orange G.....	By	392
Thiogene Dark Red G.....	M	8109	Toluyene Orange G.....	S	392
Thiogene Deep Blue BR.....	M	8111	Toluyene Orange G00.....	GRE	392
Thiogene Deep Blue.....	M	8110	Toluyene Orange R.....	M	287
Thiogene Green BL.....	M	8112	Toluyene Red OO.....	GRE	358
Thiogene Green G.....	M	8113	Toluyene Yellow OO.....	GRE	286
Thiogene Green GG.....	M	8114	Tolyl Black B.....	M	265
Thiogene Green GL.....	M	8115	Tolyl Black BB.....	M	265
Thiogene Khaki N.....	M	8116	Tolyl Black BG.....	M	265
Thiogene New Blue JL.....	M	8117	Tolyl Blue 5 R.....	M	257
Thiogene Olive Green GGN.....	M	8118	Tolyl Blue SB.....	M	189
Thiogene Orange R.....	M	8119	Tolyl Blue SR.....	M	188
Thiogene Violet V.....	M	8120	Tolyl Blue ST.....	M	257b
Thiogene Yellow GG.....	M	8121	Tolyl Blue 7650.....	M	257b
Thiogene Yellow 5 G.....	M	8122	Tonka Brown GS.....	I	U691
Thiogene Brown G.....	M	8100	Triazol Blue B.....	GRE	A 478
Thiogene Brown GG.....	M	8102	Triazol Blue B00.....	GRE	A 479
Thiogene Brown GC.....	M	8101	Triazol Blue BB00.....	GRE	A 480
Thiogene Brown GR.....	M	8103	Triazol Blue 4 B00.....	GRE	A 481
Thiogene Brown G 2 R.....	M	8104	Triazol Blue R.....	GRE	A 482
Thiogene Brown R.....	M	8105	Triazol Blue 3242.....	GRE	A 483
Thiogene Brown S.....	M	8106	Triazol Bordeaux B.....	GRE	A 484
Thion Black (V. M.).....	K	720K	Triazol Brown G00A.....	GRE	A 485
Thion Blue B.....	K	736	Triazol Brown G000.....	GRE	A 486
Thion Brown (V. M.).....	K	886	Triazol Brown HRO.....	GRE	A 487
Thion Dark Blue BO.....	K	887	Triazol Brown S000.....	GRE	A 488
Thion Direct Blue.....	K	736a	Triazol Dark Blue BH000.....	GRE	A 490
Thion Green 2 G.....	K	888	Triazol Dark Blue BHPO000.....	GRE	A 491
Thion Green 829.....	K	889	Triazol Dark Blue BHTO000.....	GRE	A 492
Thion Navy Blue (V. M.).....	K	890	Triazol Dark Blue B00.....	GRE	A 489
Thion Orange (V. M.).....	K	891	Triazol Dark Blue 3 G.....	GRE	A 493

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Triazol Dark Blue ROO.....	GrE	A494	Victoria Blue B base.....	B	559
Triazol Fast Yellow 2 GOOOO.....	GrE	617	Victoria Blue B base.....	K	559
Triazol Green BPOO.....	GrE	A495	Victoria Blue BE.....	B	559
Triazol Green GPOO.....	GrE	A496	Victoria Blue BS.....	B	559
Triazol Pure Blue 3 B.....	GrE	A497	Victoria Blue BSS.....	B	559
Triazol Pure Blue R.....	GrE	A498	Victoria Blue R.....	B	555
Triazol Violet R.....	GrE	A499	Victoria Blue 4 R.....	B	522
Triazol Violet RR.....	GrE	A500	Victoria Blue 4 R.....	I	522
Triazol Yellow NBPOO.....	GrE	304	Victoria Blue 4 R.....	tM	522
Trisulphon Blue B.....	S	409	Victoria Blue Base.....	S	559a
Trisulphon Blue 3 G.....	S	403a	Victoria Blue Base 61272.....	H	559a
Trisulphon Blue R.....	S	378	Victoria Brilliant Blue B.....	By	550b
Trisulphon Brown A.....	S	449	Victoria Fast Violet B.....	U265	
Trisulphon Brown B.....	S	449	Victoria Fast Violet 2 R.....	By	U269
Trisulphon Brown G.....	S	454	Victoria Green.....	B	497a
Trisulphon Brown GG.....	S	457	Victoria Green.....	tM	497a
Trisulphon Brown MB.....	S	449	Victoria Green BF.....	B	497a
Trisulphon Violet B.....	S	322	Victoria Green 4833.....	By	497a
Tropaeoline (V. M.).....	C	143	Victoria Green 4834.....	B	497a
Tropaeoline OO.....	H	133	Victoria Green Base.....	B	497a
Trypan Blue.....	M	391	Victoria Green Base.....	tM	497a
Trypan Red.....	M	359	Victoria Pure Blue L.....	By	U270
Turnerie Yellow OOO.....	I	U692	Victoria Pure Blue B.....	B	559
Turquoise Blue.....	Q	498	Victoria Scarlet 2.....	M	A439
Turquoise Blue G.....	By	498	Victoria Scarlet 2 R.....	M	169
Tuscaline Orange G.....	B	99	Victoria Scarlet 3 R.....	M	A440
Typophor Black FB.....	B	U193	Victoria Scarlet 4 R.....	tM	169
Typophor Brown FB.....	B	U195	Victoria Violet B.....	B	61a
Typophor Black F 3 R.....	B	U194	Victoria Violet 4 BS.....	By	61
Typophor Brown FB.....	B	U196	Victoria Violet 4 BS.....	B	61
Typophor Red FG.....	B	U197	Victoria Violet 4 BS.....	S	61
Typophor Yellow FR.....	B	U198	Victoria Violet 4 BSL.....	M	61
Typophor Yellow F 3 R.....	B	U199	Victoria Violet R.....	I	61
Ultra Flavine SD.....	S	U714	Victoria Violet RL.....	M	61b
Ultra Violet B.....	S	632a	Victoria Violet S 4 B.....	CG	61
Ultra Violet FKN.....	K	632a	Victoria Violet 10190.....	BK	61c
Ultra Violet LCP.....	S	632	Victoria Yellow.....	P	134
Ultra Violet 943.....	K	632a	Vidal Black.....	M	717
Ultracyanine B.....	S	644	Vigoureux Brown I.....	M	U477
Union Acid Black BH.....	H	462a	Vigoureux Fast Black T.....	M	159a
Union Acid Black GH.....	H	462a	Vigoureux Green B.....	C	U299
Union Black.....	Q	462a	Violet 2 B.....	K	518a
Union Black BRN.....	S	462a	Violet 2 B.....	tM	518a
Union Black SOJ.....	A	462a	Violet 6 B.....	Q	517
Union Blue H.....	S	128a	Violet DV.....	Q	518a
Union Blue R.....	K	128a	Violet NX.....	AW	518a
Union Blue (V. M.).....	C	128a	Violet 9 O.....	P	518a
Union Fast Claret.....	Lev	238	Violet 300 XE.....	P	518a
Union Red B.....	K	A412a	Violet 55396.....	H	518a
Union Red BS.....	K	A412b	Violet Base 2 B.....	Q	518a
Universal Black B.....	By	U267	Violet Base 5747.....	BK	518a
Urania Blue.....	WD	665	Violet Black.....	B	290
Uranine.....	M	585	Violet Crystals.....	K	518
Uranine A.....	B	585	Violet Crystals 6 BO.....	I	518
Uranine N.....	M	585	Violet Crystals O.....	M	518
Ursol A.....	A	923	Violet Crystals 142 S.....	K	518
Ursol ADF.....	A	923	Violet Direct VR.....	G	A660
Ursol D.....	A	923	Violet Moderne N.....	DH	624
Ursol DB.....	A	923	Violet Neutral O.....	M	518a
Ursol DF.....	A	923	Violettine 3 R.....	AW	U591
Ursol GG.....	A	923	Viridanthrene B.....	B	765
Ursol P.....	A	923	Vitoline Yellow 5 G.....	tM	606
Ursol PP.....	A	923	Vitoline Yellow R.....	tM	606
Ursol Gray AL.....	A	923	Vulcan Blue BO.....	Lev	U740
Varnish Black.....	WD	U548	Vulcan Blue G.....	Lev	U741
Varnish Black 5 R.....	Q	U816	Water Blue.....	C	539
Vesuvine B.....	B	284	Water Blue MX.....	Q	539
Vesuvine BLII.....	B	284	Water Blue S 2 K.....	A	539
Vesuvine BLR 2.....	B	284	Water Blue 4215.....	A	539
Vesuvine BPX.....	B	284	Water Blue 32129.....	A	539
Vesuvine O.....	B	283	Water Blue 67774.....	A	539
Vesuvine OOO.....	B	283	Water Blue 67775.....	A	539
Vesuvine PPL.....	B	283	Water Blue 105370.....	A	539
Vesuvine S.....	B	283	Wood Red 40 F.....	(Sch)	168
Victoria.....	G	169	Wool Black (V. M.).....	K	U390
Victoria Black B.....	By	262	Wool Black (V. M.).....	Lev	220b
Victoria Blue B.....	B	559	Wool Black (V. M.).....	Q	220b
Victoria Blue B.....	BK	559	Wool Black 5 A.....	tM	217g
Victoria Blue B.....	I	559	Wool Black 6 AN.....	tM	217g
Victoria Blue B.....	M	559	Wool Black B.....	A	220b
Victoria Blue B.....	S	559	Wool Black B.....	K	U390
Victoria Blue B.....	tM	559	Wool Black 2 B.....	A	220b
Victoria Blue B.....	tM	559	Wool Black BB.....	AW	272c

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Wool Black 3 B	Lev	220b	Wool Green B	Q	566
Wool Black 4 B	A	220	Wool Green B8	By	566
Wool Black 4 B	I	272c	Wool Green B8	BK	566
Wool Black 6 B	A	220	Wool Green 8	B	566
Wool Black 10 B	tM	217g	Wool Green 8	CV	566
Wool Black 4 BC	A	220	Wool Green 8AK	I	566a
Wool Black 4 BFL	A	220	Wool Green 16437	L	566a
Wool Black 6 B8	A	220	Wool Jet Black 3 B	A	220c
Wool Black 4 BX	A	220	Wool Red	K	168b
Wool Black CD	K	U390	Wool Red (V. M.)	C	236
Wool Black CL	K	U390	Wool Red C	S	236b
Wool Black DW	BK	269	Wool Red CS	K	168b
Wool Black G	A	220b	Wool Red G	B	A140
Wool Black 6 G	G	U646	Wool Red K 10 BX	B	A141
Wool Black GG	tM	217	Wool Red L	K	168b
Wool Black GR	A	220b	Wool Red MC	K	168b
Wool Black GRF	tM	220b	Wool Red SB	CG	64
Wool Black HN	tM	217g	Wool Red SOC	K	168b
Wool Black LR	K	U390	Wool Red 7742	BK	168b
Wool Black MX	Q	220b	Wool Scarlet	K	U396
Wool Black N	M	A441	Wool Scarlet (V. M.)	Lev	80b
Wool Black NN	I	272c	Wool Scarlet 5 B	H	80c
Wool Black N 4 B	By	A301	Wool Scarlet RR	B	A142
Wool Black NC	K	U390	Wool Scarlet 4 R	BK	80a
Wool Black NP	By	A302	Wool Scarlet 3 RB	B	A143
Wool Black NP	CG	272c	Wool Violet B	Q	59a
Wool Black NR	K	U390	Wool Violet R	K	U397
Wool Black SG	GrE	272c	Wool Violet S	B	59
Wool Black V	K	U390	Wool Violet SL	K	U398
Wool Black 11714	I	272c	Wool Yellow	(Sch)	23
Wool Black 9904	BK	269	Wool Yellow AT	K	U399
Wool Black (greenish)	K	U390	Wool Yellow D	K	U399
Wool Blue	C	U300	Wool Yellow G	K	U399
Wool Blue	Q	538b	Wool Yellow LDV	K	U399
Wool Blue (V. M.)	Lev	U391	Wool Yellow R	K	U399
Wool Blue (V. M.)	AW	565a	Wool Yellow S	G	U647
Wool Blue B	A	562b	Wool Yellow 1501	K	U399
Wool Blue 2 B	A	565a	Xanthine CJB	T	606
Wool Blue 5 B	A	565a	Xanthine I	P	606
Wool Blue 2 BX	A	565a	XL Acid Eosine 5 B	H	590a
Wool Blue G	A	565	XL Blue	H	U770
Wool Blue G	K	U391	XL Blue GR	H	U770
Wool Blue 2 G	K	U391	XL Brown RH	H	284a
Wool Blue G 446 N	K	U391	XL Green Y	H	U771
Wool Blue M	AW	562b	XL Maroon	H	U772
Wool Blue N	By	562a	Xylene Blue AS	S	508
Wool Blue R	A	565a	Xylene Blue ASL	S	508
Wool Blue R	By	562b	Xylene Blue BS	S	508
Wool Blue 5 R	H	538	Xylene Blue VS	S	507
Wool Blue RX	A	565a	Xylene Light Yellow 2 G	S	22
Wool Blue S	K	U391	Xylene Light Yellow 2 G	S	22
Wool Blue S	Q	538b	Xylene Light Yellow R	S	22
Wool Blue 2 S	K	U391	Xylene Red B	S	579
Wool Blue SB	AW	562b	Xylene Yellow 3 G	K	22
Wool Blue SD00	B	530d	Xylidine Orange RR	BK	79
Wool Blue SL00	B	530d	Xylidine Scarlet	(Sch)	82
Wool Blue SR	By	562b	Yellow (V. M.)	CJ	U500
Wool Blue TB	K	U391	Yellow (V. M.)	I	141d
Wool Blue 1092	A	565a	Yellow CP	Lev	142a
Wool Blue Black 2019	K	U392	Yellow FY	H	U773
Wool Brown MC	K	U393	Yellow NF	BK	U487
Wool Brown P	K	U393	Yellow NF	Q	U817
Wool Brown 8VR	K	U393	Yellow PC	DH	U801
Wool Brown UB	K	U393	Yellow R	W	141d
Wool Brown 2808	K	U393	Yellow 2 S	P	137
Wool Canary OD	H	U765	Yellow 15	S	U715
Wool Cerise SR	K	U394	Yellow 20	H	U773
Wool Claret 21 B	Lev	U742	Yellow 33413	H	U773
Wool Claret Red 87 B	Lev	U743	Yellow 41471	H	U733
Wool Claret Red 211	Lev	U743	Yellow (for feathers)	WD	U549
Wool Claret Red 357	Lev	U743	Yellow Black M	BK	U488
Wool Fast Black B	B	U200	Yellow Fast-To-Soap	P	203
Wool Fast Blue BL	B	U201	Yellow Fat Color	B	68
Wool Fast Blue BL	By	U271	Yellow Green 6 B	BK	U489
Wool Fast Blue GL	By	U272	Zambesi Black B	A	A46
Wool Fast Blue L	I	U693	Zambesi Black 2 BA	A	A47
Wool Fast Orange G	B	U202	Zambesi Black BH	A	A48
Wool Fast Yellow G	B	U203	Zambesi Black BR	A	A49
Wool Fast Yellow 5 GX	B	U204	Zambesi Black OTA	A	A53
Wool Fast Yellow WG	B	U205	Zambesi Black D	A	A50
Wool Green (V. M.)	K	U395	Zambesi Black F	A	A51
Wool Green	tM	566a	Zambesi Black OBA	A	A54

Name.	Manu- fac- turer.	Serial No.	Name.	Manu- fac- turer.	Serial No.
Zambesi Black R.....	A	A52	Zambesi Red 4 B.....	A	A59
Zambesi Black V.....	A	A55	Zambesi Red 6 B.....	A	A60
Zambesi Black VM.....	A	A56	Zambesi Red 8 B.....	A	A61
Zambesi Bordeaux TB.....	A	A57	Zambesi Rubine B.....	A	A62
Zambesi Brown G.....	A	330	Zambesi Scarlet 6 B.....	A	A63
Zambesi Brown 2 G.....	A	330	Zambesi Scarlet 2 BL.....	A	A64
Zambesi Brown 4 R.....	A	330a	Zambesi Scarlet FR.....	A	A65
Zambesi Pure Blue 4 B.....	A	274b	Zambesi Scarlet PR.....	A	A66
Zambesi Red B.....	A	A58			



